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June 1, 2006

EPA Region 5 Records Ctr.

Mr. Kenneth Theisen On-Scene Coordinator U.S. Environmental Protection Agency 77 West Jackson Boulevard SE-5J Chicago, IL 60604

Subject:

PCB-Contaminated Soil Removal Action Summary Report

Outboard Marine Corporation Plant #2

Waukegan, Lake County, Illinois

Technical Direction Document No. S05-0507-002

Tetra Tech Contract No. 68-W-00-129

Dear Mr. Theisen:

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting the enclosed PCB-contaminated soil removal action summary report for the Outboard Marine Corporation (OMC) Plant #2 in Waukegan, Illinois. Tetra Tech was the START contractor responsible for providing oversight of PCB-contaminated soil excavation and disposal, and state endangered plant species removal and restoration activities performed by U.S. Environmental Protection Agency's (U.S. EPA) contractor Environment Quality Management, Inc. (EQM). During the excavation, Tetra Tech collected 44 soil samples from various sites and the laboratory analysis of the samples are presented in this report as well.

If you have any questions or comments about the report or need additional copies, please contact me at (262) 879-0175 ext. 225.

Sincerely,

Ken Brown, CHMM **Environmental Scientist**

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Enclosure

CC: Lorraine Kosik, U.S. EPA START Project Officer

Therese Gioia, Tetra Tech START Program Manager

U.S. ENVIRONMENTAL PROTECTION AGENCY PCB-CONTAMINATED SOIL REMOVAL ACTION SUMMARY REPORT OUTBOARD MARINE CORPORATION PLANT #2 WAUKEGAN, LAKE COUNTY, ILLINOIS

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY Region 5 Emergency Response Branch 77 West Jackson Boulevard Chicago, IL 60604

TDD No.: S05-0507-002
Date Prepared: June 1, 2006
Contract No.: 68-W-00-129
Prepared by: Tetra Tech EM Inc.

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ACRONYMS AND ABBREVIATIONS

AOC Area of concern
bgs Below ground surface
BHC Hexachlorocyclohexane
BMS Backfill material sample

Bombardier Bombardier Motor Corporation CSS Confirmation soil sample

Deigan Deigan and Associates, LLC
United States Department of Justice

El Environment, Inc.

EMS Excavated material sample EOX Extractable organic halides

ERRS Emergency and Rapid Response Services
EQM Environmental Quality Management, Inc.

EW East wall F Floor

°F Degrees Fahrenheit ID Identification

IDNR Illinois Department of Natural Resources
IEPA Illinois Environmental Protection Agency

LSS Landfill soil sample
mg/kg Milligram per kilogram
mg/L Milligram per liter

μg/m³ Microgram per cubic meter
μg/cm² Microgram per square centimeter

NIOSH National Institute for Occupational Safety and Health

NW North wall

OMC Outboard Marine Corporation

OSC On-scene Coordinator

PA/VSI Preliminary assessment/visual site inspection

PCB Polychlorinated biphenyl

ppm Parts per million

PRP Potentially responsible party

START Superfund Technical Assessment and Response Team

SW South wall

TDD Technical Direction Document

TCE Trichloroethene

TCLP Toxicity Characteristic Leaching Procedure

Tetra Tech Tetra Tech EM Inc.

TP Trichlorophenoxypropionic acid
TSCA Toxic Substances Control Act

U.S. EPA United States Environmental Protection Agency

USGS United States Geological Survey VOC Volatile organic compound

WW West wall



TDD: S05-0507-002 (OMC)

Under Technical Direction Document (TDD) No. S05-0507-002, the United States Environmental Protection Agency (U.S. EPA) tasked the Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) to perform oversight of polychlorinated biphenyl- (PCB) contaminated soil removal activities at the Outboard Marine Corporation (OMC) Plant Number 2 (#2) site in Waukegan, Lake County, Illinois. The excavation was performed by U.S. EPA's Emergency and Rapid Response Services (ERRS) contractor, Environmental Quality Management, Inc. (EQM), of Cincinnati, Ohio. The OMC Trust had previously conducted waste removal activities in fall 2002, and U.S. EPA had conducted waste removal activities in summer 2003.

PCB contamination was documented by Deigan and Associates, LLC (Deigan) of Libertyville, Illinois during sampling events on the lakefront portion of the former OMC Plant #2 property in July 2004, October 2004, and May 2005. In response to the PCB contamination in the lakefront area, the U.S. EPA and its contractor conducted an environmental assessment to confirm the contamination and further define the extent of PCB contamination. The extent of contamination appeared to be defined along the site fence on the eastern edge of the Plant #2 property, between the east containment cell and the Lake Michigan shore, running south of the North Ditch about 400 feet. Several state-listed endangered plant species were identified by Deigan in the area, but only one, Beach Marram Grass, was identified in the excavation area. Beach Marram Grass plants were removed from the site prior to the excavation of the PCB-contaminated soil, and stored in plastic to be replanted later. The grass plants were replanted in the same location they occurred naturally prior to their removal. Specifically, Tetra Tech was assigned to develop a field sampling plan; perform oversight of excavation activities performed by the ERRS contractor; collect soil samples for laboratory testing; provide site photographic documentation; provide oversight of the ERRS contractor, provide a written log documenting all on-site activities; and prepare this summary report including photos, summarized analytical results, and laboratory reports.

Section 2.0 of this report discusses site location and background information. Section 3.0 discusses removal activity oversight and soil sampling. Section 4.0 summarizes START's findings during the oversight activities and analysis of laboratory results. Section 5.0 presents recommendations for further actions. References cited in the report are listed after Section 5.0. Appendix A provides photographs of

U.S. EPA removal activities. analytical results for the samp	Appendix B includes START's field notes. bles collected by START.	Appendix C contains validated
•	•	

This section discusses OMC Plant #2's location and describes the site and its history.

2.1 SITE LOCATION AND DESCRIPTION

Removal activities summarized in this report were performed at OMC Plant #2, located in the city of Waukegan, Lake County, Illinois (see Figure 1). The site coordinates are Latitude 42°22'8.6" North and Longitude 87°49'10.1" West.

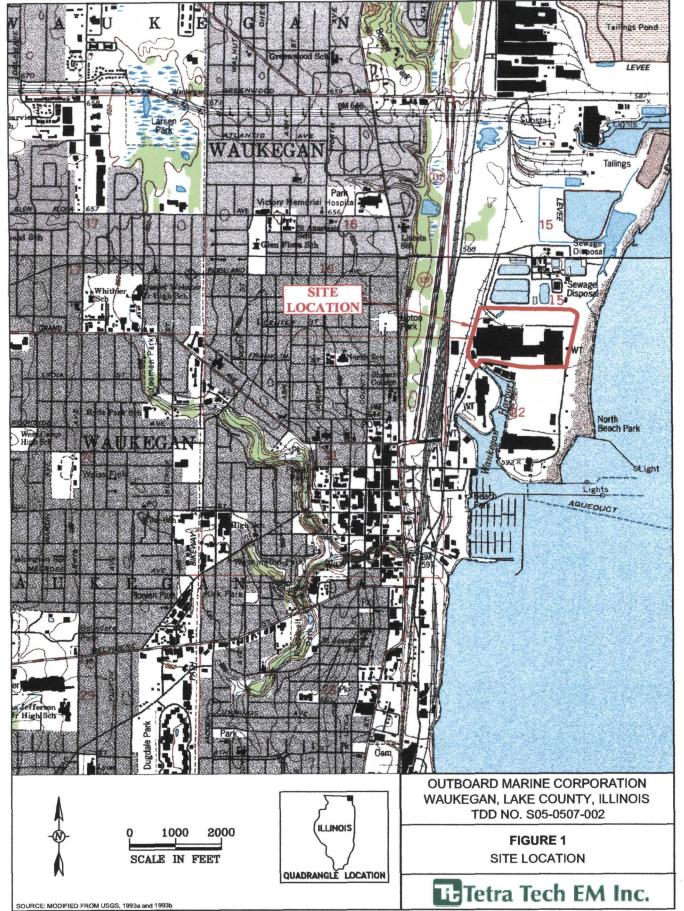
The OMC Plant #2 property encompasses 65 acres, which includes approximately 1,000,000 square feet of a former manufacturing plant building and several parking lot areas to the south and north of the building. The Plant #2 Site is bordered by the North Ditch and North Shore Sanitary District to the north, the public beaches of Lake Michigan to the east, by Seahorse Drive and Larsen Marine to the south, and a railroad to the west. Site features are depicted in Figure 2.

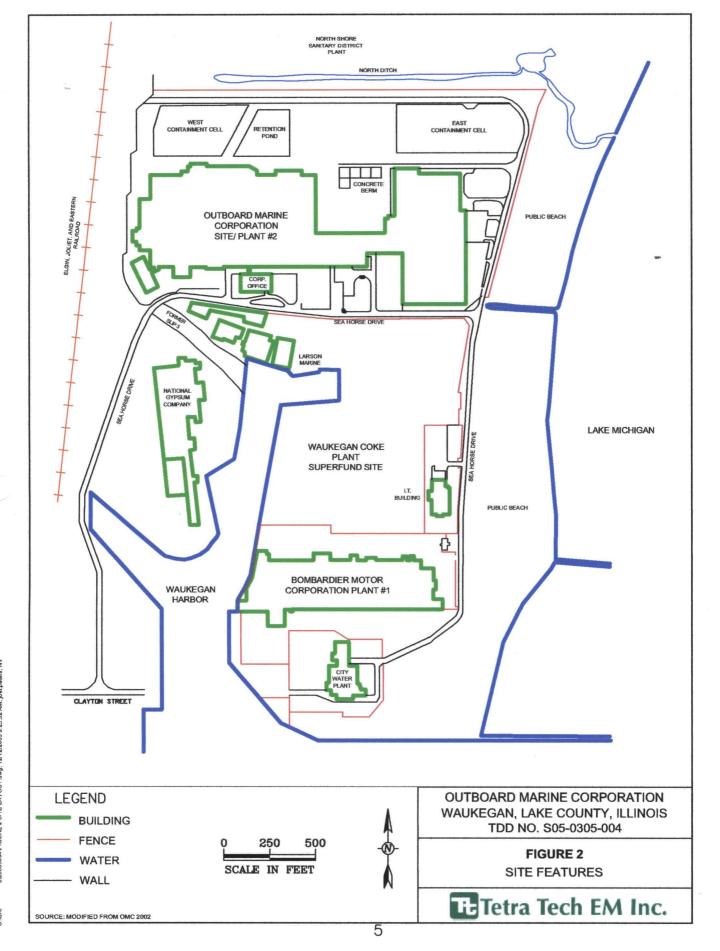
2.2 SITE HISTORY

On December 22, 2000, OMC filed for Chapter 11 federal bankruptcy protection and ceased all operations. Bombardier Motor Corporation (Bombardier), a Canadian company, bought the OMC product lines and some assets in Plant #2 on February 5, 2001. Bombardier planned to sell, or move to a new facility in Wisconsin. The court-appointed Trustee filed a petition to abandon the property on November 15, 2001. On August 9, 2002, the court entered an order converting OMC's Chapter 11 case to a Chapter 7 case.

As a result of this pending abandonment, a Resource Conservation and Recovery Act (RCRA) Preliminary Assessment/Visual Site Inspection (PA/VSI) was done at the site in July 2001 (TechLaw 2001). Many hazardous substances were found at the site, therefore the U.S. EPA Emergency Response Branch was asked to perform a comprehensive site investigation. This investigation would address all avenues of exposure to determine if an imminent and substantial endangerment to public health and/or the environment existed.

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Plant #2 existed for over 50 years, during which it housed various aspects of the manufacture of marine engines. Throughout the 60's and into the 70's, the plant used hydraulic oil containing PCBs in its die casting operations. One of many locations where the oil was recovered from operations was the chip wringer area, where aluminum chips were removed from the oil. In addition, the plant used large amounts of trichloroethene (TCE) as a degreaser, and a very large degreaser unit once operated at the site.

On March 4 through 6, 2002, the U.S. EPA and its contractor collected numerous samples from the ambient air, drums and tanks, monitoring wells, sediment from the North Ditch, soil, insulating materials, and surface area (wipe samples) in and near the plant. Results of the inspection showed the presence of hazardous materials and wastes, including radioactive materials, hydrofluoric acid, metallic mercury, flammable liquids, chlorinated solvents, PCBs (in two dozen large electrical transformers), and asbestos. Two air samples contained PCBs above the National Institute for Occupational Safety and Health (NIOSH) standard of 1 microgram per cubic meter ($\mu g/m^3$). In addition, numerous wipe samples taken from machines and floors contained PCBs above the NIOSH industrial standard of 10 micrograms per 100 square centimeters ($\mu g/cm^2$).

As a result of the analytical results of the samples described above that were written in the report "Outboard Marine Corporation: Discovery Site Visit Report" (Tetra Tech 2002), the U.S. Department of Justice (DOJ), U.S. EPA's Office of Regional Counsel, along with the State of Illinois Attorney General's Office and the OMC Trustee agreed on a settlement which required the Trustee to take certain actions before it could abandon the site. In the settlement, which was intended to address only the most obvious threats to the public, the Trustee was required to complete the following remediations:

- Remove and properly dispose of all drums and containers and the draining of all tanks in Plant #2.
- Drain and flush all transformers in Plant #2.
- Drain and dispose of all contents of the die cast machines and other pieces of equipment found in Plant #2
- Remove and dispose of all batteries and capacitors found in Plant #2.
- Pump and dispose of all liquids in the sump/cistern inside the chip wringer room and outside the chip wringer room in the storm sewer.
- Decontaminate all die cast machines and metal working machines, and properly dispose of all collected liquids.

Plant #2 was declared abandoned on December 10, 2002, by the Bankruptcy Court (Tetra Tech 2003a).



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U.S. EPA conducted waste removal at Plant #2 over a 9-week period beginning in May 2003. The completed removal activities included waste removal, floor decontamination, tunnel inspections, soil and groundwater sampling, asbestos removal, and transformer draining. Determination based on the analytical results from samples collected during the site visit was that most of the PCB contamination existed in the older portions of the plant (western portion). Machines in the metal working area were removed and scrapped, and the floor was cleaned with high-pressure, hot water. Tunnels in the old die cast area were inspected and videotaped to document potential contamination sources. No substantial contaminant releases to the environment were observed in the tunnels. Soil and groundwater were sampled during U.S. EPA removal activities to document releases of contaminants to the environment. Transformers were drained and left disconnected.

During U.S. EPA removal activities, START conducted air sampling to determine air quality inside the Plant #2 building, and sample results showed that PCB concentrations in air were still elevated. Wipe samples of the ceiling structure collected during potentially responsible party (PRP) removal activities and post-cleaning floor wipe samples indicated that the ceiling and floor may be the sources for PCBs in the air in the older (western) portion of the plant. Concentrations of PCBs in the air may persist until more extensive measures for decontaminating the floor and interior ceiling structure are undertaken. U.S. EPA removal activities are documented in the report entitled "EPA Removal Action Summary Report" dated December 12, 2003 (Tetra Tech 2003b).

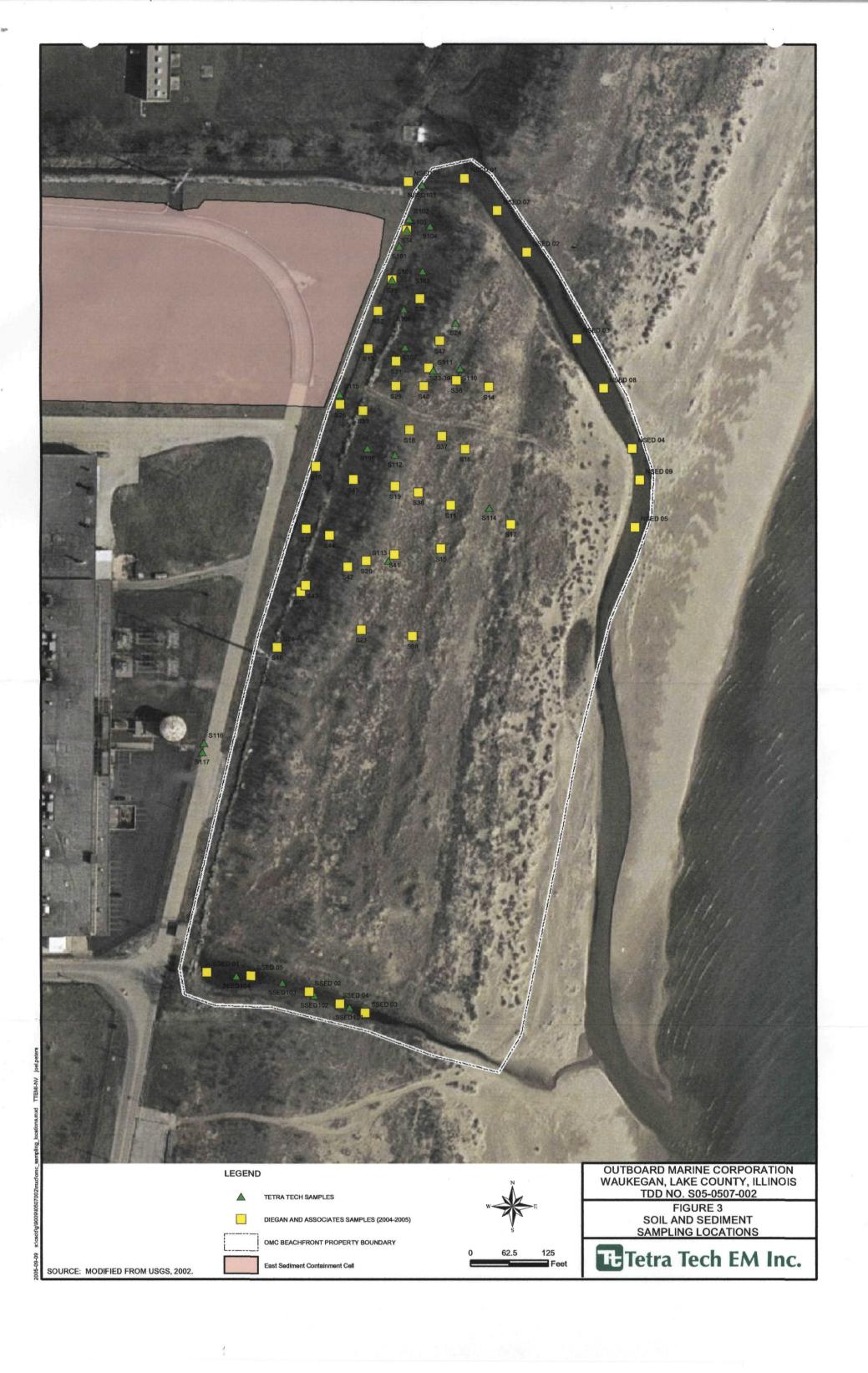
Upon abandonment of the Plant #2 property by the OMC Trust on December 10, 2002, U.S. EPA arranged for operation and maintenance of the treatment system associated with the sediment containment cells. These services could only be funded by U.S. EPA for a period of 1 year, and so, as of December 10, 2003, arrangements with the City of Waukegan were required to continue these operations.

In 2004, the City of Waukegan contracted Deigan to perform an environmental site investigation of the easternmost portion of the OMC Plant #2, next to the Lake Michigan shoreline. The sampling area is approximately 13 acres located along the easternmost side of the OMC Plant #2 property. Deigan set up a grid pattern of surface and subsurface borings. Sediment samples were collected from approximately 100-foot station intervals along the north and south drainage ditches over three phases of sampling. Three of the soil borings were constructed as shallow monitoring wells to sample the groundwater. Deigan collected soil, sediment, and groundwater samples in July 2004, October 2004, and May 2005. Nine



sediment samples were collected from the North Ditch and five samples from the South Ditch. Soil PCB contamination was found in concentrations ranging from 1.2 to 14,000 milligrams per kilogram (mg/kg). PCB contamination was found in sediments at concentrations ranging from 0.068 to 150 mg/kg (Deigan 2004).

In response to the PCB contamination in the lakefront area, the U.S. EPA contracted Tetra Tech to conduct an environmental assessment to confirm the contamination and further define the extent of PCB contamination. The extent of contamination was determined and the highest soil concentrations were found in the northwest corner of the site near the North Ditch and the east sediment containment cell (Tetra Tech 2005). Figure 3 depicts the soil and sediment sampling locations from Deigan's and Tetra Tech's site assessments.



3.0 REMOVAL AND SAMPLING ACTIVITIES

EQM was contracted by U.S. EPA under the ERRS contract to perform excavation activities, while Tetra Tech was retained under the START contract to provide oversight of EQM, conduct sampling, and document the removal actions. The following sections detail the tasks performed during the excavation at the OMC Plant #2 site.

3.1 EXCAVATION ACTIVITIES

EQM initiated excavation activities by removing PCB-contaminated soil from the north end of the subject site beginning December 14, 2005. Planned activities included soil excavation from two areas, a north area running north to south along the fence line to excavate sample locations S-25, S-34, S-101, and S105, and a south area excavating sample locations S23-39, S-47, and S-107. In accordance with State of Illinois regulations, START had consulted with the Illinois Department of Natural Resources (IDNR) for guidance on how to best address the state-endangered grass plants present in an area of the site to be excavated. Per that consultation, prior to the initiation of excavation activities, Beach Marram grass was removed from the south excavation area by hand and stored in plastic to keep it moist. An excavator was used to scrape off the top 6 inches of soil, which was stockpiled nearby to be replaced after excavation activities were completed. The PCB-contaminated soil was transported in off-road dump trucks and deposited on an asphalt surface. Excavation activities were conducted in three different areas: north and south excavations, and the South Ditch. Figure 4 depicts the locations and extent of these excavations.

As excavation proceeded, the contaminated soil was transferred to a stockpile located on the asphalt surface of a former parking lot. The parking lot was located on the north side of the Plant #2 building. Two excavators were used initially to remove contaminated soil from the north and south excavations. Two off-road dump trucks transported the soil to the staging area where it was stockpiled. As excavation proceeded one excavator was moved to the soil stockpile to heap the soils further. This excavator also loaded the off-road trucks with clean sand brought on site to be backfilled into the excavations.

In addition to documentation, START collected soil samples from excavation floors and side walls, material removed from the excavations, and the clean sand used to backfill the excavations.



The soil samples were submitted for analysis to TestAmerica, Inc., in Buffalo Grove, Illinois. All samples were analyzed for PCBs by U.S. EPA Method 8082.

On December 20, 2005, EQM moved one excavator to the South Ditch to excavate contaminated sediment. Previous samples collected from the South Ditch exhibited PCB concentrations up to 150 parts per million (ppm). With the excavator situated on the north bank of the South Ditch, sediment was removed from an area about 8 feet wide by 150 feet long. Sediment was excavated to a depth of 2 feet below ground surface (bgs). The sediment was transported in the off-road dump trucks to the stockpile on the north side of the building. The South Ditch was not backfilled and three samples were collected from the floor of the ditch.

Excavation activities refocused on the north and south excavations. After an initial attempt at removing contaminated soils from the north excavation, START collected samples CSS-WW-3-02 through CSS-F-8-15 from the excavation floor and side walls. Laboratory analytical results for samples from the east side walls, CSS-EW-3-07 and CSS-EW-3-08, indicated PCB concentrations of 54.5 ppm and 765 ppm, respectively. Analytical results for a sample collected from the south side wall, CSS-SW-8-12, indicated a PCB concentration of 63.4 ppm. EQM directed its operators to remove additional soil from the east and south walls of the north excavation. An additional volume of soil measuring 6 feet wide by 4 feet deep by 100 feet long was removed from the east wall and an additional 10 feet from south wall of the north excavation.

After the additional excavation of the east and south side walls, two soil samples were collected from the north excavation east side wall. Samples CSS-EW-3-38 and CSS-EW-3-39 exhibited PCB concentrations of 667 and 1,140 ppm, respectively, so a second volume of additional soil was removed from the east wall of the north excavation. The additional soil volume measured 10 feet wide by 3 feet deep by 60 feet long. No additional samples were collected after the second soil removal from the east wall. The north excavation area was backfilled with clean sand.

Excavation in the south area continued until contaminated soil was removed to depths of 6 feet bgs at S-47 and 8 feet bgs at S-23. Floor and side wall samples collected from the south excavation exhibited PCB concentrations generally below 10 ppm. One sample (CSS-NW-5-26) from the north wall of the south excavation exhibited 48.2 ppm PCBs and a floor sample, CSS-F-6-27, exhibited a PCB concentration of

32.2 ppm, prompting additional soil removal from the north wall. No additional soil samples were collected from north wall. The south excavation was then backfilled with clean sand.

The north excavation backfilling and south excavation soil removal was completed when transport of organic sand mix to the site began. After backfilling was complete, the original topsoil removed from the south excavation and piled nearby was replaced, covering about half of the south excavation's surface. The organic sand mix (a mix of 70 percent clean sand and 30 percent double-screened compost material) was spread over the rest of the south and the entire north excavation to a depth of six inches. On January 6, 2006, START and the U.S. EPA On-Scene Coordinator (OSC) replanted the Marram Grass plants that had been removed prior to excavation activities. The plants were carefully handled to minimize damage and placed to cover the area from which they were removed.

Decontamination of the heavy equipment used on-site was conducted using a high-pressure water jet. Some contaminated material spilled from the truck to the roadway while being transported from the site to the parking lot. Decontamination of the roadway was performed using a sweeper provided by the City of Waukegan.

3.2 SOIL SAMPLING

Soil sampling was conducted during excavation activities to determine the effectiveness of the removal, to document the PCB concentrations being removed from the site, and to confirm that clean soils brought on site were not contaminated. The purpose of sampling and quick laboratory response was to provide current information about site conditions as excavation was proceeding. The total number of samples collected during excavation activities was 44. These samples were collected from three sources: excavated material (EMS), confirmation soil samples (CSS), and backfill material (BMS). A total of 31 confirmation samples were collected from different excavation locations to determine the PCB content of soil left in place. Two backfill material samples were collected.

Soil sample identifications were generated by the sample type, location, and number as follows:

Sample type: confirmation soil sample (CSS), excavated material sample (EMS), backfill material sample (BMS), and landfill soil sample (LSS)



TDD: S05-0507-002 (OMC)

Sample location: west wall (WW), east wall (EW), north wall (NW), south wall (SW), floor (F) Sample depth: number noting depth in feet below ground surface

Sample number: sequential number to uniquely identify the sample and track the number of samples collected

Soil samples were stored in a cooler while shipping to the laboratory. Samples were submitted to Test America, Inc. for analysis of PCBs by U.S. EPA Method 8082. Results of soil sample analyses are summarized in Tables 1, 2 and 3. Locations of soil samples are provided in Figures 5 and 6.

TABLE 1

OMC PLANT #2 CONFIRMATION SOIL SAMPLE SOIL ANALYTICAL RESULTS
U.S. EPA SOIL REMOVAL
DECEMBER 14, 2005 - JANUARY 6, 2006

SAMPLE ID	DATE SAMPLED	DEPTH (feet)	PCB-1248 CONCENTRATION (mg/kg)	DESCRIPTION
CSS-WW-3-02	12/16/05	3	138	West wall of north excavation along containment cell
CSS-WW-3-03	12/16/05	3	744	West wall of north excavation along containment cell
CSS-F- 4-04	12/16/05	4	14.8	Floor of north excavation
CSS-F- 4-05	12/16/05	4	18.4	Floor of north excavation
CSS-NW-3-06	12/19/05	3	13.1	North wall of north excavation
CSS-EW-3-07	12/19/05	3	54.5	East wall of north excavation
CSS-EW-3-08	12/19/05	3	765	East wall of north excavation
CSS-EW-6-09	12/19/05	6	4.67	East wall of north excavation
CSS-WW-6-10	12/19/05	6	0.444	West wall of north excavation
CSS-WW-8-11	12/19/05	8	0.0516	West wall of north excavation
CSS-SW-8-12	12/19/05	8	63.4	South wall of north excavation
CSS-EW-8-13	12/19/05	8	1.06	East wall of north excavation
CSS-F-6-14	12/19/05	6	1.7	Floor of north excavation
CSS-F-8-15	12/19/05	8	0.0257	Floor of north excavation
CSS-SW-5-20	12/19/05	5	0.203	South wall of south excavation
CSS-NW-5-21	12/19/05	5	0.108	North wall of south excavation
CSS-NW-5-23	12/19/05	5	0.593	North wall of south excavation
CSS-EW-5-24	12/19/05	5	0.276	East wall of south excavation
CSS-F-6-25	12/19/05	6	3.5	Floor of south excavation
CSS-NW-5-26	12/19/05	5	48.2	North wall of south excavation
CSS-F-6-27	12/19/05	6	32.2	Floor of south excavation

SAMPLE ID	DATE SAMPLED	DEPTH (feet)	PCB-1248 CONCENTRATION (mg/kg)	DESCRIPTION
CSS-F-2-28	12/20/05	2	1.68	Floor of south excavation
CSS-F-2-29	12/20/05	2	4.01	Floor of south excavation
CSS-SD-2-30	12/20/05	2	<0.0321	Floor of South Ditch
CSS-SD-2-31	12/20/05	2	<0.0319	Floor of South Ditch
CSS-SD-2-32	12/20/05	2	<0.0318	Floor of South Ditch
CSS-EW-7-35	12/21/05	7	0.96	East wall of south excavation
CSS-F-8-36	12/21/05	8	0.538	Floor of south excavation
CSS-SW-7-37	12/21/05	7	0.321	South wall of south excavation
CSS-EW-3-38	12/22/05	3	667	East wall of north excavation
CSS-EW-3-39	12/22/05	3	1140	East wall of north excavation

Notes

Samples were analyzed for PCBs using U.S. EPA Method 8082, and only PCB-1248 was detected. All results in ppm (mg/kg) based on dry weight unless otherwise noted. Results in **Bold/Shaded** indicate concentrations exceeding method detection limit.

CSS = Confirmation soil sample mg/kg = Milligram per kilogram ppm = Part per million

OMC = Outboard Marine Corporation

PCB = Polychlorinated biphenyl

U.S. EPA = U.S. Environmental Protection Agency

TABLE 2

OMC PLANT #2 EXCAVATED MATERIAL SAMPLE SOIL ANALYTICAL RESULTS U.S. EPA SOIL REMOVAL DECEMBER 14, 2005 - JANUARY 6, 2006

SAMPLE ID	DATE SAMPLED	DEPTH (feet)	PCB-1248 CONCENTRATION (mg/kg)	DESCRIPTION
EMS-F-2-01	12/16/05	2	20.2	Floor of north excavation
EMS-P-0-16	12/19/05	0	440	Composite sample of 24 points on waste pile
EMS-P-0-17	12/19/05	0	543	Composite sample of 24 points on waste pile
EMS-BP-0-33	12/21/05	0	1.86	Interim pile in south excavation
EMS-P-0-34	12/21/05	0	223	Composite of waste pile
EMS-GR-0-40	12/22/05	0	67.1	Composite of waste pile (gray ring)
EMS-ODR-0-41	12/22/05	0	87.7	Composite of waste pile (outer dark ring)
EMS-IHP-0-42	12/22/05	0	67.9	Composite of waste pile (inner heaped pile)

Notes

Samples were analyzed for PCBs using U.S. EPA Method 8082, and only PCB-1248 was detected. All results in ppm (mg/kg) based on dry weight unless otherwise noted. Results in **Bold/Shaded** indicate concentrations exceeding method detection limit.

EMS = Excavated material sample mg/kg = Milligram per kilogram ppm = Part per million OMC = Outboard Marine Corporation PCB = Polychlorinated biphenyl

U.S. EPA = U.S. Environmental Protection Agency

TABLE 3

OMC PLANT #2 BACKFILL MATERIAL SAMPLE SOIL ANALYTICAL RESULTS U.S. EPA SOIL REMOVAL DECEMBER 14, 2005 - JANUARY 6, 2006

SAMPLE ID	DATE SAMPLED	DEPTH (feet)	PCB-1248 CONCENTRATION (mg/kg)
BMS-P-0-18	12/19/05	0	0.0724
BMS-P-0-19	12/19/05	0	<0.0264

Notes

Samples were analyzed for PCBs using U.S. EPA Method 8082, and only PCB-1248 was detected. All results in ppm (mg/kg) based on dry weight unless otherwise noted. Results in **Bold/Shaded** indicate concentrations exceeding method detection limit.

BMS = Backfill material sample
mg/kg = Milligram per kilogram
ppm = Part per million
OMC = Outboard Marine Corporation
PCB = Polychlorinated biphenyl
U.S. EPA = U.S. Environmental Protection Agency







U.S. EPA completed excavation activities using ERRS contractor EQM and START contractor Tetra Tech to remove PCB-contaminated soil from an area just east of the east sediment containment cell. The excavations removed contaminated soil from two areas adjacent to the east sediment containment cell. Contaminated sediment was also removed from a 150-foot stretch of the South Ditch to a depth of about 2 feet. All excavated soil and sediment were stockpiled on the asphalt surface of a former parking lot.

Confirmation soil samples collected from the north excavation indicate that PCB-contaminated soil remains in place adjacent to the east sediment containment cell. This area is in close proximity to the cell wall, so no efforts to remove additional soil were expended to avoid potential damage to the cell. Soils from the south excavation were removed to a depth of 8 feet bgs at sample location S-23 and to 4 feet bgs elsewhere. Photographs of excavation activities are presented in Appendix A.

In accordance with State of Illinois regulations, START initiated a consultation with IDNR for guidance on how to best address the state endangered grass plants that were present in an area of the site to be excavated. Per that consultation, the Beach Marram grass was removed from the south excavation area by hand and stored in plastic to keep it moist. An excavator was used to scrape off the top 6 inches of soil, and it was stockpiled nearby and replaced after excavation activities were completed. After the south excavation had been backfilled, START and the OSC replanted the Marram Grass plants. The plants were carefully handled to minimize damage and placed to cover the area from which they were removed.

The PCB-contaminated soil was approved for landfill disposal in early May 2006, and transportation of the soil to the Onyx Zion Landfill in Zion, Illinois was completed on May 19, 2006. Approximately 9,743 tons of soil were disposed of at the landfill. The transplanted grass plants were observed to viable, with at least 85 percent of the plants showing new, green growth.

All equipment was decontaminated on site and the former parking lot was cleaned with a street sweeper.

TABLE 4 OMC PLANT #2 LANDFILL SOIL SAMPLE ANALYTICAL RESULTS U.S. EPA SOIL REMOVAL DECEMBER 14, 2005 - JANUARY 6, 2006

	LSS-0-0-45		
Analyte	Results	Units_	
Flashpoint	>220	°F	
Free Liquid	No sample flowed	NA	
pН	8.63	PH Units	
Phenol	<0.676	mg/kg	
Reactive Cyanide	<0.139	mg/kg	
Reactive Sulfide	<6.97	mg/kg	
Extractable Organic Halides	<50.0	mg/kg	
PCBs	43.8	mg/kg	
TCLP Metals by U.S. EPA Method 1.	311/6000/7000		
Mercury	<0.000200	mg/L	
Arsenic	<0.0500	mg/L	
Barium	0.904	mg/L	
Cadmium	< 0.00500	mg/L	
Chromium	<0.100	mg/L	
Selenium	<0.0500	mg/L	
Silver	<0.0500	mg/L	
Lead	<0.00500	mg/L	
TCLP Semivolatiles by U.S. EPA Met	thod 1311/8270C		
o-Cresol	<17.6	mg/L	
m,p-Cresol	<17.6	mg/L	
Cresol	<17.6	mg/L	
1,4-Dichlorobenzene	<0.660	mg/L	
2,4-Dinitrotoluene	<0.0176	mg/L	
Hexachlorobenzene	<0.0176	mg/L	
Hexachlorobutadiene	<0.0440	mg/L	
Hexachloroethane	<0.264	mg/L	
Nitrobenzene	<0.176	mg/L	
Pentachlorophenol	<8.80	mg/L	
Pyridine	<0.440	mg/L	
2,4,5-Trichlorophenol	<35.2	mg/L	
2,4,6-Trichlorophenol	<0.176	mg/L	
TCLP Chlorinated Herbicides by U.S	. EPA Method 8151		
2,4-D	<0.100	mg/L	
2,4,5-TP (Silvex)	<0.0100	mg/L	

	LSS-0-0-45		
Analyte	Results	Units	
TCLP Pesticides by EPA Method 13:	11/8081A		
gamma-BHC (Lindane)	<0.000500	mg/L	
Chlordane	<0.000500	mg/L	
Endrin	< 0.000500	mg/L	
Heptachlor	< 0.000500	mg/L	
Heptachlor epoxide	<0.000500	mg/L	
Methoxychlor	<0.000500	mg/L	
Toxaphene	< 0.0100	mg/L	

Notes

Samples were analyzed for PCBs using U.S. EPA Method 8082, and only PCB-1248 was detected. All results in ppm (mg/kg) based on dry weight unless otherwise noted. Results in **Bold/Shaded** indicate concentrations exceeding method detection limit.

BHC = Hexachlorocyclohexane
D = Dichlorophenoxyacetic acid
TP = Trichlorophenoxypropionic acid
°F = degrees Fahrenheit
mg/kg = Milligram per kilogram
mg/L = Milligram per liter
OMC = Outboard Marine Corporation
PCB = Polychlorinated biphenyl
TCLP = Toxicity Characteristic Leaching Procedure
U.S. EPA = U.S. Environmental Protection Agency



5.0 RECOMMENDATIONS

Excavation activities conducted by the U.S. EPA Emergency Response Branch concluded on January 6, 2006, while disposal activities concluded on May 19, 2006. No further work is recommended for the site.

REFERENCES

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- Tetra Tech. 2003a. "PRP Removal Action Summary Report for Outboard Marine Corporation Plant #2, Waukegan, Lake County, Illinois." January 20.
- Tetra Tech. 2003b. "USEPA Removal Action Summary Report, Outboard Marine Corporation Plant #2, Waukegan, Lake County, Illinois." December 12
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TDD: S05-0507-002 (OMC)

APPENDIX A REMOVAL ACTION PHOTOGRAPHS

(12 Pages)



Photograph No.: 1

Location:

TDD Number: S05-0507-002

Outboard Marine Corporation Plant #2

Subject: Removal of state endangered grass plants from south excavation area.

Orientation: North

Orientation: East

Date:

December 15, 2005

December 15, 2005

Date:



Photograph No.: 2

Location:

TDD Number: S05-0507-002

Outboard Marine Corporation Plant #2

Subject: Brush and tree removal from areas to be excavated.

A-1

Tetra Tech EM Inc.



Photograph No.: 3

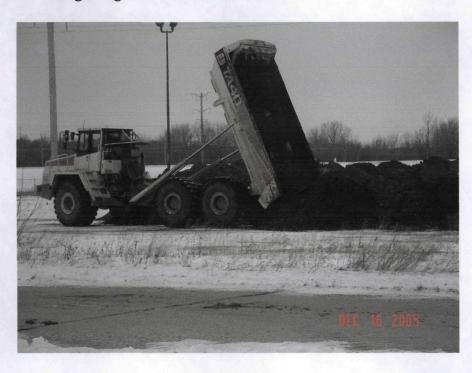
TDD Number: S05-0507-002

Location: Outboard Marine Corporation Plant #2

Subject: Excavation of soil from the north excavation area. Note the force main along

Date:

the right edge of the excavation.



Photograph No.: 4

TDD Number: S05-0507-002

Orientation: North

Date:

1. 505-0507-002

December 16, 2005

December 16, 2005

Location:

Outboard Marine Corporation Plant #2

Subject:

Excavated material stockpile on former asphalt parking lot.

Tetra Tech EM Inc.



Photograph No.: 5

TDD Number:

S05-0507-002

Outboard Marine Corporation Plant #2 **Location: Subject:**

North excavation area showing shallow groundwater depth.



Photograph No.: 6

TDD Number: S05-0507-002 Orientation: South

Orientation: North

December 19, 2005

December 19, 2005

Date:

Date: Outboard Marine Corporation Plant #2

Location: Subject:

North excavation area. Force main is present on the right side of the

excavation and a floor sample location (CSS-F-4-05) is marked in the

foreground.



Photograph No.: 7

TDD Number: S05-0507-002

Location: Outboard Marine Corporation Plant #2

Subject: Stockpile of topsoil scraped from top 6 inches of south excavation.



Photograph No.: 8

TDD Number: S05-0507-002

Orientation: East

Date:

Date:

December 19, 2005

December 19, 2005

Location:

Outboard Marine Corporation Plant #2

Subject:

Excavation of material from south excavation area.



Photograph No.: 9

Orientation: East

TDD Number:

S05-0507-002

Date:

December 20, 2005

Location:

Outboard Marine Corporation Plant #2

Subject:

Excavation of South Ditch sediment. The excavator accessed the ditch from

its north bank.



Photograph No.: 10

Orientation: West

TDD Number:

S05-0507-002

Date: December 20, 2005

Location:

Outboard Marine Corporation Plant #2

Subject:

Excavation of South Ditch.



Photograph No.: 11

TDD Number:

S05-0507-002

Location:

Outboard Marine Corporation Plant #2

Subject: Soil removal from the south excavation area.



Photograph No.: 12

TDD Number:

S05-0507-002

Location:

Outboard Marine Corporation Plant #2

Subject:

Soil removal from the south excavation area.

A-6

Orientation: East

Date:

Date:

December 21, 2005

December 21, 2005



Photograph No.: 13

TDD Number: S05-0507-002

Location: Outboard Marine Corporation Plant #2

Backfilling clean sand into the north excavation. **Subject:**

Orientation: South

December 21, 2005 Date:



Photograph No.: 14

TDD Number:

S05-0507-002

Outboard Marine Corporation Plant #2 **Location:**

Subject: Backfilled south excavation. Orientation: West

December 20, 2005 Date:



December 23, 2005

Date:

Orientation: East

January 4, 2006

Date:

Photograph No.: 15

TDD Number:

S05-0507-002

Location:

Outboard Marine Corporation Plant #2

Subject:

Completed backfill of north excavation.



Photograph No.: 16

TDD Number:

S05-0507-002

Outboard Marine Corporation Plant #2

Location: Subject:

Loader replacing original topsoil over south excavation area.



Photograph No.: 17

TDD Number:

S05-0507-002

Location: Subject:

Outboard Marine Corporation Plant #2

Spreading special topsoil mix recommended by IDNR.



Photograph No.: 18

TDD Number:

S05-0507-002

Orientation: North

Date:

Date:

January 6, 2006

January 4, 2005

Location:

Outboard Marine Corporation Plant #2

Subject:

Replanting grass plants by hand in the south excavation area.



Photograph No.: 19

TDD Number:

S05-0507-002

Location: **Subject:**

Outboard Marine Corporation Plant #2

Replanted Beach Marram Grass.

Orientation: Unknown

January 6, 2006 Date:



Photograph No.: 20

TDD Number:

S05-0507-002

Location:

Outboard Marine Corporation Plant #2

Subject:

Excavated soil stockpile left on site.

Orientation: East

Date:

January 6, 2006



Photograph No.: 21

TDD Number:

Location:

S05-0507-002

Subject:

Outboard Marine Corporation Plant #2

Loading soil for transport to landfill.

Orientation: North

Date:

May 17, 2006



Photograph No.: 22

TDD Number:

S05-0507-002

Location:

Outboard Marine Corporation Plant #2

Subject:

Loading soil for transport to landfill.

Orientation: North

Date:

May 17, 2006



Photograph No.: 23

TDD Number: S05-0507-002

Location: Outboard Marine Corporation Plant #2

Subject: Cleaned parking lot surface.



Photograph No.: 24

24 Orientation:

North

May 19, 2006

TDD Number:

S05-0507-002

Date:

Date:

May 19, 2006

Location:

Outboard Marine Corporation Plant #2

Subject:

Street sweeper cleaning parking lot surface.

APPENDIX B FIELD NOTES

(Eight Pages)

TDD: S05-0507-002 (OMC)

OMC Waukegan - Field Notes

12/2/05	
1115	Tetra Tech (Ken Brown) arrived on-site to mark excavation areas. Talked to Jeff Walwark (Waukegan) and he said there is a crew working on-site moving rock wall boulders.
1300	Margo Milde arrived on-site to speak with Tetra Tech and briefly walked the site. Tetra Tech showed her the areas to be excavated.
	Only one area to be excavated has endangered Marran Grass present (The area between S-23/39 and S-47). There are a few individual plants, and mostly Little Bluestem. Little Bluestem is a high quality prairie grass, but is not a statelisted species.
1430	Tetra Tech completed marking the excavation areas and left the site.
12/8/05	
1245	Tetra Tech (Ken Brown) met EPA OSC (Ken Theisen) on-site. Ken was looking over South Ditch to figure out how to access heavy equipment.
1315	Kevin Adler arrived (EPA RPM) and all of us investigated the trailer left on-site by CH2M Hill. Hill is conducting RI for EPA. The trailer is inside the building and will suit our purposes well.
1400	Bob Armstrong arrived (EQM) and we went over the areas to be excavated that was previously marked by Tetra Tech. Margo Milde did not attend the meeting. Bob asked if Tetra Tech could initiate the HASP and send it to EQM for completion. Bob also asked if Tetra Tech could survey in the containment cell wall along its eastern edge to aid excavation. Tetra Tech agreed. Everyone walked the areas to be excavated.
1500	Everyone walked the South Ditch area and checked out the trailer again.
1530	Everyone offsite and gates locked.
12/14/05	
0745	Tetra Tech (Ken Brown) arrived on-site. EQM has trailer opened (Bob Armstrong). Equipment has not arrived yet. Gave Bob Armstrong the site plan drawing showing utilities and cost estimate for surveying containment cell wall.
0830	City of Waukegan Water Department personnel arrived to mark force main. Crew marked force main with water witching rods.
1000	NSSD employee arrived to tell us that the force main belong to the City of Waukegan.

1030	First dump truck arrived.
1330	EQM begins clearing and grubbing.
1330	START off site. EPA and EQM still on-site. Surveyors not returned yet (McClure Engineering).
12/15/	05
1115	Tetra Tech START arrived on-site. EPA OSC Theisen was ready to dig out endangered grass plants. The plan is to dig out individual plants by hand, and restore them after excavation is complete. All the Marram grass plants that could be found were dug out and placed in plastic bags.
1230	Tetra Tech and OSC found steel plates so EQM could weld them on the bucket teeth so that topsoil could be scraped off. Soil is being dumped (stockpiled) on the asphalt parking lot north of the building.
1330	Marked area to be excavated 0-2' with yellow color. Next lift will be marked tomorrow.
1645	Tetra Tech and START offsite.
12/16/	05
0730	Tetra Tech arrived on-site. EQM begin excavating. Will start to sample contaminated soil.
0800	START collected soil sample. EMS-F-2-01 from north end of North excavation.
0900	Excavator found 8" foreemain in North excavation. It is blue PVC.
1100	Kevin Addler arrived on-site. Second excavator has collected topsoil for sandy area where grass was dug up.
1300	Collected soil samples from excavation floor and wells:
	Floor Sample Lattitude Longitude CSS-WW-3-02 42°22.306 87°48.899 CSS-WW-3-03 42°22.302 87°48.901 CSS-F-4-04 42°22.304 87°48.897 CSS-F-4-05 42°22.302 87°48.898

Gave samples to Test America. EQM digging to 6' bgs in North excavation. EQM is stripping soil from 1' to 4' from the excavation around S-107, S-23, S-47. The soil below 4' bgs will be removed.

1500

1600 EPA OSC off site.

1630 START off site.

12/19 /05

O700 Tetra Tech on-site. Weather was cold. Both dump trucks will not start and only one excavator is running. START preparing to take samples.

O800 Collected soil samples from north excavation from side walls and floor. 10 samples to be sent to lab.

Sample	<u>Lattitude</u>	<u>Longitude</u>
CSS-NW-3-06	42.37195	87.81468
CSS-EW-3-07	42.37196	87.81474
CSS-EW-3-08	42.37185	87.81482
CSS-EW-6-09	42.37174	87.81476
CSS-WW-6-10	42.37162	87.81494
CSS-WW-8-11	42.37153	87.81502
CSS-SW-8-12	42.37146	87.81500
CSS-EW-8-13	42.37149	87.81493
CSS-F-6-14		
CSS-F-8-15		

O900 Test America arrived to pick up samples listed above.

1100 Collected composite sample from waste pile from 24 points on the pile (about 1500 cyds). Also, collected 2 samples from the backfill material.

Sample	<u>Lattitude</u>	<u>Longitude</u>
EMS-P-0-16		
EMS-P-0-17		
BMS-P-0-18		
BMS-P-0-19		
CSS-F-6-27		
CSS-NW-5-26	42.37127	87.81498
CSS-F-6-25	42.37123	87.81485
CSS-EW-5-24	42.37120	87.81479
CSS-NW-5-23	42.37125	87.81485
CSS-NW-5-21	42.37125	87.81482
CSS-SW-5-20	42.37120	87.81484

Test America picked up waste, backfill, and south excavation samples.

Test America called and said that Friday's samples were hotter than anticipated, so they needed to be rediluted and rerun. Results will come tomorrow morning.

1700 Everyone offsite.

12/20/05

O715 Train at harbor entrance. Everyone on-site at 7:15

0800 Lab results were as follows:

<u>Sample</u>	<u>Amount</u>
EMS-F-2-01	20,200 μg/kg
CSS-WW-3-02	138,000 μg/kg
CSS-WW-3-03	744,000 µg/kg
CSS-F-4-04	14,800 μg/kg
CSS-F-4-05	18,400 μg/kg

6900 EQM excavators working on digging and the concrete and gravel to 2' bgs around S-29.

Showed EQ where to dig in South Ditch. Excavator moving there after lunch.

EQM is putting large pile in South excavation back into the hole. The hole is 6' deep. EQM is also beginning to dig out South Ditch.

1415 Collected samples from South Ditch were as follows:

<u>Sample</u>	<u>Lattitude</u>	<u>Longitude</u>
CSS-SD-2-30	42.36829	87.81540
CSS-SD-2-31	42.36834	87.81559
CSS-SD-2-32	42.36838	87.81586
CSS-F-2-28	42.37110	87.81515
CSS-F-2-29	42.37103	87.81515

EQM has completed South Ditch and filling in the southern excavation. Now beginning to dig around.

Delivered following samples to Test America:

CSS-F-2-28 CSS-F-2-29 CSS-SD-2-30 CSS-SD-2-31 CSS-SD-2-32

EQM dump trucks starting maintenance. Excavators working on area around S-23 and piling up the waste stockpile.

1630 Called lab for results.

 Sample
 Amount

 CSS-NW-3-06
 13,100 μg/kg

 CSS-EW-3-07
 54,500 μg/kg

CSS-EW-3-08	765,000 μg/kg
CSS-EW-6-09	4,670 μg/kg
CSS-WW-6-10	444 μg/kg
CSS-WW-8-11	51.6 μg/kg
CSS-SW-8-12	63,400 µg/kg
CSS-EW-8-13	1,060 µg/kg
CSS-F-6-14	$1,700 \mu\mathrm{g/kg}$
CSS-F-8-15	25.7 μg/kg

1700 Called OSC Theisen and discussed where to further excavate in the North excavation. START offsite.

12/21/05

O700 START and EQM on-site. Based on lab results, EQM is digging more from south edge of North excavation (10 feet more). Also, they will dig more from NE corner of North excavation.

0800 EPA OSC on-site.

0830 Called lab for results:

Sample	<u>Amount</u>
EMS-P-0-16	440,000 μg/kg
EMS-P-0-17	543,000 μg/kg
BMS-P-0-18	72.4 μg/kg
BMS-P-0-19	ND
CSS-SW-5-20	203 μg/kg
CSS-NW-5-21	108 μg/kg
CSS-NW-5-23	593 μg/kg
CSS-EW-5-24	276 μg/kg
CSS-F-6-25	3,500 μg/kg
CSS-NW-5-26	48,200 μg/kg
CSS-F-6-27	32,200 μg/kg

1000 Collected sample from gray pile that Burke has built in South excavation. EMS-BP-0-33

Collected composite sample from waste pile. EMS-P-0-34 202,000 (wet weight)

1340 Collected confirmation samples from South excavation.

<u>Sample</u>	<u>Lattitude</u>	<u>Longitude</u>
CSS-EW-7-35	42.37111	87.81485
CSS-F-8-36		
CSS-SW-7-37	42.37106	87.81494

1500 Test America picked up samples for the day. Samples 33 through 37 were

collected.

1600 START off site.

1800 Test America called with results.

<u>Sample</u>	<u>Amount</u>
CSS-F-2-28	$1,680 \mu g/kg$
CSS-F-2-29	4,010 µg/kg

12/22/05

O815 START, EQM and EPA arrived on-site.

6900 EQM is continuing to fill in South excavation. EQM is also removing another 10' from the NE corner of North excavation. This well had PCB concentrations of 54.5 and 765 ppm.

1000 Collected 2 samples from east well of North excavation

<u>Sample</u>	<u>Lattitude</u>	<u>Longitude</u>
CSS-EW-3-38	42.37179	87.81488
CSS-EW-3-39	42.37174	87.81490

1030 CSC and RM are collecting 3 composite samples from different areas of the waste pile. (Gray ring, outer dark ring, inner heaped pile)

EMS-GR-0-4- (Gray ring)

EMS-ODR-0-41 (Outer dark ring) EMS-IHP-0-42 (Inner heaped pile)

Submitted samples to Great Lakes driver.

Prepared samples to ship to STL. These will be split samples of 40, 41 and 42. Remainder of composite samples stored in bags.

Everyone offsite. North excavation filled and South excavation about half filled. More backfill will be arriving tomorrow.

Bought cooler to ship samples. Fedex box on Lewis Avenue. Too small to take cooler, so had to take it to take it to the Fedex office near Candlewood Suites.

12/23/05

O700 START, and EQM arrived on-site and beginning to backfill South excavation with sand.

Dowsen Marine brought over approximately 4 cyds of soil and put it on waste pile.

0930	Onyx arrived to pick up roll off box and empty it on waste pile about 20 cyds.
1000	EQM finished back filling with sand. Sand is almost gone and South excavation still needs 3-4 feet to get back to grade.
1200	EQM, START and EPA offsite.
12/27/05	
1600	START received lab results at home by phone from Test America. Sample results were 3 composite samples collected from waste pile on Dec 22, 2005.
	EMS-GR-0-40 EMS-ODR-0-41 EMS-IHP-0-42
1/4/06	
0730	START arrived on-site. EQM already on-site and continuing work. EQM had arrived and resumed backfilling and excavating yesterday Jan 3, 2006. EQM is receiving backfill sand and is continuing to backfill South excavation to original grade. The topsoil will then be replaced.
0900	EQM continuing to backfill South excavation with sand. Trucks are delivering clean sand. End Loader is on-site to clean up the pile.
1030	START collected clean sand samples. EQM had excavated extra soil from the north excavation yesterday. They excavated an extra 6' to the east, 4' deep and about 100' long.
1530	Ken arrived on-site.
1600	START off site.
1/5/06	
0730	START onsite. EQM and EPA already onsite. CH2M Hill onsite and doing work. EQM is bringing sand on-site for backfill and is expecting several loads of 70 % / 30 % mix topsoil.
0900	Topsoil sand mix is beginning to arrive. EQM continuing to contour excavation area. EQM also piling the excavated soils stockpile and cleaning up parking lot surface. About 10,000 tons excavated soil.
1100	CH2M Hill offsite after pumping out water from tanks.
1330	START collected composite soil samples for PCB analysis. Samples consist of 2:1 and 1:1 mix of excavated soil to clean sand.

	EMS-1:1-0-43 (1:1 mix) EMS-2:1-0-44 (2:1 mix)
1530	EQM spreading stockpiled topsoil across South excavation to a depth of about 4-6".
1700	START and everyone offsite.
1/6/06	
0730	START onsite. EQM has finished dressing up the waste pile and spreading the topsoil mix on the excavation areas. EQM will begin deconning equipments.
0930	EQM continuing to spread topsoil mix on excavated areas. EPA and START posted warning signs around the soil stockpile.
1300	START and EPA OSC replant Marram Grass plants that were removed from the south excavation before digging started. Plants were spread out across the area at 5-6 foot spacing.
1400	EQM beginning to decon excavators and dump trucks.
1500	The City of Waukegan sent over a street sweeper to clean up the concrete driveway between the excavation areas and the stockpile. The street sweeper also cleaned some of the asphalt parking lot.
1630	Everyone off site.

APPENDIX C VALIDATED ANALYTICAL RESULTS

(Eight Reports)

TDD: S05-0507-002 (OMC)

MEMORANDUM

Date: January 31, 2006

To: Ken Brown, Project Manager, Tetra Tech EM Inc. (Tetra Tech)

Superfund Technical Assessment and Response Team (START) for Region 5

From: Nancy McDonald, Chemist, Tetra Tech START for Region 5

Subject: Data Validation for

Outboard Marine Company (OMC) Plant #2 Site

Waukegan, Illinois

Analytical Technical Direction Document (TDD) No. S05-0507-003

Project TDD No. S05-0507-002

TestAmerica Analytical Testing Corporation (TestAmerica), Buffalo Grove, Illinois

Work Orders No. B512237, B512245, B512255, B512272, B512287, B512295, and B601076

Polychlorinated Biphenyl (PCB) Analysis of 43 Soil Samples

1.0 INTRODUCTION

The Tetra Tech START for Region 5 validated PCB analytical data for 43 soil samples collected on December 16, 2005, through January 5, 2006, at the OMC Plant #2 site in Waukegan, Illinois, during soil evacuation activities. All samples were analyzed for PCBs under the above-referenced work orders by TestAmerica using U.S. Environmental Protection Agency (U.S. EPA) SW-846 Method 8082.

The data were validated in general accordance with U.S. EPA's "Contract Laboratory Program National Functional Guidelines for Organic Data Review" dated October 1999. Organic data validation usually consists of a review of the following quality control (QC) parameters: holding times, an instrument performance check, initial and continuing calibrations, blank results, surrogate recovery results, matrix spike and matrix spike duplicate (MS/MSD) results, laboratory control sample (LCS) results, internal standard (IS) response, and target compound identification and quantitation. Only summary data packages

Data Validation for

OMC Plant #2 Site

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Project TDD No. S05-0507-002

Page 2

were evaluated; therefore, instrument performance check, initial and continuing calibration, and target

compound identification and quantitation results were not reviewed.

Section 2.0 discusses the results of the organic data validation, and Section 3.0 presents an overall

assessment of the data. The attachment to this memorandum contains TestAmerica's summary of the

analytical results as well as START's handwritten data qualifications where warranted.

2.0 ORGANIC DATA VALIDATION RESULTS

The results of START's organic data validation are summarized below in terms of the QC parameters

reviewed. The data qualifier listed below was applied to the sample analytical results where warranted

(see the attachment).

• J - The analyte was detected. The reported numerical value is considered estimated for QC

reasons.

2.1 HOLDING TIMES

The holding time limits for PCB analysis of soil samples are 14 days to extraction and 40 days from

extraction to analysis. The samples were extracted and analyzed within the holding time limits.

2.2 INSTRUMENT PERFORMANCE CHECK

The instrument performance check results were not included in the data packages. No qualifications are

required for this data gap.

Data Validation for OMC Plant #2 Site Analytical TDD No. S05-0507-003 Project TDD No. S05-0507-002 Page 3

2.3 INITIAL AND CONTINUING CALIBRATIONS

The initial and continuing calibration results were not included in the data packages. No qualifications are required for this data gap.

2.4 BLANK RESULTS

The laboratory method blanks did not contain PCBs at detectable concentrations.

2.5 SURROGATE RECOVERY RESULTS

All surrogate recovery results were within QC limits with the following exceptions. Surrogates were diluted out in samples CSS-WW-3-02, CSS-WW-3-03, CSS-EW-08, EMS-P-0-16, and EMS-P-0-17. No qualifications are required for these data gaps.

2.6 MS/MSD RESULTS

The MS and MSD analyses were performed on samples CSS-EW-6-09, BMS-P-0-19, and EMS-ODR-0-41. For the MS/MSD analyses for samples CSS-EW-6-09 and EMS-ODR-0-41, recoveries for Aroclors 1016 and 1260 could not be reliably determined because of interferences from Aroclor 1248 in the unspiked samples. The relative percent differences (RPD) between the MS and MSD results of 51.2 percent in sample EMS-ODR-0-41 exceeded QC limits, implying heterogeneity in the sample; therefore, the detected PCB result for sample EMS-ODR-0-41 was flagged "J" to indicate that the concentration is considered estimated. This same heterogeneity may also apply to the other samples.

Data Validation for OMC Plant #2 Site Analytical TDD No. S05-0507-003 Project TDD No. S05-0507-002 Page 4

2.7 LCS RESULTS

An LCS was analyzed with each analytical batch. All accuracy results were within QC limits.

2.8 IS RESPONSE

ISs are not required for PCB analyses.

2.9 TARGET COMPOUND IDENTIFICATION AND QUANTITATION

Because of the high concentrations of PCBs and non-target analytes in all samples, TestAmerica analyzed the samples at 10- to 200,000-fold dilutions to bring the results within calibration range. Raw data were not included in the data packages; therefore, target compound identification and quantitation could not be reviewed. No qualifications are required for this data gap.

3.0 OVERALL ASSESSMENT OF DATA

Overall, the sample analytical data generated by TestAmerica are acceptable for use as qualified. Only summary data packages were evaluated; therefore, instrument performance check, initial and continuing calibration, and target compound identification and quantitation results were not reviewed.

(847) 808-7766 FAX (847) 808-7772

20 December 2005

Lab ID: B512237

Jackie Doan EQM 1800 Carillon Blvd. Cincinnati, OH 45240

RE: OMC - Waukegan

Enclosed are the results of analyses for samples received by the laboratory on 12/16/05. The sample results relate only to the tested analytes of interest and to the sample as received by the laboratory. At the time of analysis, the laboratory was in compliance with current NELAP standards and held accreditation for all analyses performed unless noted by a qualifier. The laboratory's Illinois NELAP accreditation number is 100261.

This report can not be reproduced, except in full, without written approval from the laboratory. If you have any questions concerning this report, please feel free to contact Andy Johnson.

Sincerely,

TestAmerica Analytical Testing Corporation

Deborah Lowe

Laboratory Director

ulnat I Time

James Knapp

Quality Assurance Manager



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: N/A
Project Manager: Jackie Doan

Lab 1D: B512237 **Reported:** 12/20/05 11:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EMS-F-2-01	B512237-01	Soil	12/16/05 08:00	12/16/05 15:50
CSS-WW-3-02	B512237-02	Soil	12/16/05 13:15	12/16/05 15:50
CSS-WW-3-03	B512237-03	Soil	12/16/05 13:20	12/16/05 15:50
CSS-F-4-04	B512237-04	Soil	12/16/05 13:20	12/16/05 15:50
CSS-F-4-05	B512237-05	Soil	12/16/05 13:25	12/16/05 15:50

Sample Receipt Notes

Please note that the chain of custody (COC) included with this report is considered part of the report. The data user should review any comments or notes made on the COC. Any receipt issues found by the laboratory that are not noted on the COC will be stated below.

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:

ved by:



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: N/A
Project Manager: Jackie Doan

Lab ID: B512237 **Reported:** 12/20/05 11:33

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - Buffalo Grove, IL

EMS-F-2-01 (B512237-01) Soil Sampled: 12/16/05 08:00 Received: 12/16/05 15:50 PCB-1016 ND 2930 ug/kg dry 1000 5120310 12/16/05 12/19/05 EPA 8082 PCB-1221 ND 2930 " " " " " " " " " " PCB-1232 ND 2930 " " " " " " " " " " " " " PCB-1242 ND 2930 " " " " " " " " " " " " " " " " " PCB-1248 20200 14700 " 5000 " " 12/19/05 " PCB-1254 ND 2930 " 1000 " " 12/19/05 " PCB-1260 ND 2930 " 1000 " " 12/19/05 " PCB-1260 ND 2930 " " " " " " " " " " " " " " " " " " "	<u></u>	1 estA	meric	a - Buii	alo Gro	ve, IL					
PCB-1016 ND 2930 ug/kg dry 1000 5120310 12/16/05 12/19/05 EPA 8082 PCB-1221 ND 2930 " " " " " " " " " " " " PCB-1232 ND 2930 " " " " " " " " " " " " " " " " " " "	Analyte			Units	Dilution	Batch	Prepared	Analyzed	Method		Notes
PCB-1221 ND 2930 " " " " " " " " " PCB-1332 ND 2930 " " " " " " " " " " " " PCB-1324 ND 2930 " " " " " " " " " " " " " " PCB-1324 ND 2930 " " " " " " " " " " " " " " PCB-1248 20200 14700 " 5000 " " " 12/19/05 " PCB-1254 ND 2930 " " " " 12/19/05 " PCB-1254 ND 2930 " 1000 " " 12/19/05 " PCB-1260 ND 2930 " " " " " " " " " " " " " " " " " " "	EMS-F-2-01 (B512237-01) Soil	Sampled: 12/16/05 08:00	Receive	ed: 12/16/0	5 15:50						
PCB-1232 ND 2930 " " " " " " " " " PCB-1248 ND 2930 " " " " " " " " " " " " PCB-1248 ND 2930 " " " 12/19/05 " PCB-1248 ND 2930 " 1000 " " 12/19/05 " PCB-1254 ND 2930 " 1000 " " 12/19/05 " PCB-1254 ND 2930 " 1000 " " " 12/19/05 " PCB-1260 ND 2930 " " " " " " " " " " " " " " " " " " "	PCB-1016	ND	2930	ug/kg dry	1000	5120310	12/16/05	12/19/05	EPA 8082		
PCB-1242 ND 2930 " " " " " " " " " PCB-1248 20200 14700 " 5000 " " 12/19/05 " PCB-1254 ND 2930 " 1000 " " 12/19/05 " PCB-1260 ND 2930 " " " " " " " " " " " " " " " " " " "	PCB-1221	ND	2930	4	"	**	"	**	н		
PCB-1248 PCB-1248 PCB-1254 ND 2930 " 1000 " " 12/19/05 " PCB-1260 ND 2930 " 1000 " " 12/19/05 " PCB-1260 ND 2930 " 1000 " " 12/19/05 " Surrogate: Tetrachloro-meta-xylene Surrogate: Decachlorobiphenyl 95.0 % 10-121 " " " " " CSS-WW-3-02 (B512237-02) Soil Sampled: 12/16/05 13:15 Received: 12/16/05 15:50 O1 PCB-1016 ND 15200 ug/kg dry 5000 \$120310 12/16/05 12/19/05 EPA 8082 PCB-1221 ND 15200 " " " " " " " " " " " " " " " " " "	PCB-1232	ND	2930	**	"	4	"	"	n		
PCB-1254 PCB-1260 ND 2930 " 1000 " " 12/19/05 " Surrogate: Tetrachloro-meta-xylene Surrogate: Decachlorobiphenyl 81.7 % 10-121 " " " " " " CSS-WW-3-02 (B512237-02) Soil Sampled: 12/16/05 13:15 Received: 12/16/05 15:50 O1 PCB-1016 ND 15200 ug/kg dry 5000 5120310 12/16/05 12/19/05 EPA 8082 PCB-1221 ND 15200 " " " " " " " " " " " " " " " " " "	PCB-1242	ND	2930	м	**		"	н	и		
PCB-1260 ND 2930 " " " " " " " " " "	PCB-1248	20200	14700	19	5000	"	"	12/19/05	n		
Surrogate: Tetrachloro-meta-xylene SI.7 % 10-121 " " " " " " " " " " "	PCB-1254	ND	2930	11	1000	**	**	12/19/05	*		
Surrogate: Decachloro-meta-sylene S1.7 % 10-121	PCB-1260	ND	2930	*	**	**	"	#	*		
Surrogate: Decachlorobiphenyl 95.0 % 10-127 " " " " CSS-WW-3-02 (B512237-02) Soil Sampled: 12/16/05 13:15 Received: 12/16/05 15:50 O1 PCB-1016 ND 15200 ug/kg dry 5000 \$120310 12/16/05 12/19/05 EPA 8082 PCB-1221 ND 15200 " " " " " " " PCB-1232 ND 15200 " "	Surrogate: Tetrachloro-meta-xylen	е	81.7 %	10-	121	"	н	,,	11		
PCB-1016	Surrogate: Decachlorobiphenyl		95.0 %	10-1	127	"	"	"	"		
PCB-1221 ND 15200 " " " " " " " " " PCB-1232 ND 15200 " " " " " " " " " " " " " " " " " "	CSS-WW-3-02 (B512237-02) Soil	Sampled: 12/16/05 13:	15 Rece	eived: 12/1	6/05 15:50)					015
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PCB-1242 ND 15200 " " " " " " " " " " " " " " " " " "	PCB-1221	ND	15200	"	11	n	ŧŧ	*			
TCB-1248	PCB-1232	ND	15200	H	n	.,	,,	n	44		
CB-1254 ND 15200 " 50000 " " 12/19/05 " PCB-1260 ND 15200 " " " " " " " " " " " " " " " " " "	PCB-1242	ND	15200	**	,,	**	tr .	n	н		
PCB-1260 ND 15200 " " " " " " " " " " " " " " " " " "	CB-1248	138000	122000	"	40000	*1		12/19/05	**		
PCB-1260 ND 15200 "	CB-1254	ND	15200	**	5000	**	**	12/19/05			
Surrogate: Decachlorobiphenyl 260 % 10-127 " " " " H CSS-WW-3-03 (B512237-03) Soil Sampled: 12/16/05 13:20 Received: 12/16/05 15:50 O1 PCB-1016 ND 15500 ug/kg dry 5000 5120310 12/16/05 12/19/05 EPA 8082 PCB-1221 ND 15500 " " " " " " PCB-1232 ND 15500 " " " " " " PCB-1242 ND 15500 "	PCB-1260	ND	15200	*	"	"	**	**			
Surrogate: Decachlorobiphenyl 260 % 10-127 " " " " H CSS-WW-3-03 (B512237-03) Soil Sampled: 12/16/05 13:20 Received: 12/16/05 15:50 O1 PCB-1016 ND 15500 ug/kg dry 5000 5120310 12/16/05 12/19/05 EPA 8082 PCB-1221 ND 15500 " " " " " " PCB-1232 ND 15500 " " " " " " PCB-1242 ND 15500 "	Surrogate: Tetrachloro-meta-xylen	e	75.0 %	10-1	121	"	n	n	"		
PCB-1016 ND 15500 ug/kg dry 5000 5120310 12/16/05 12/19/05 EPA 8082 PCB-1221 ND 15500 "<	-		260 %	10-	127	"	"	*	tt .	Н	
PCB-1221 ND 15500 " <	CSS-WW-3-03 (B512237-03) Soil	Sampled: 12/16/05 13:2	20 Rece	ived: 12/1	6/05 15:50)					015
PCB-1221 ND 15500 " <	PCB-1016	ND	15500	ug/kg dry	5000	5120310	12/16/05	12/19/05	EPA 8082		
PCB-1242 ND 15500 " " " " " " " " " " " " " " " " " "	PCB-1221	ND	15500		tę.	ū		19	"		
PCB-1248 744000 155000 " 50000 " 12/19/05	PCB-1232	ND	15500	,	"	.,	**		**		
PCB-1254 ND 15500 " 5000 " 12/19/05 " PCB-1260 ND 15500 " " " " " " Surrogate: Tetrachloro-meta-xylene 84.0 % 10-121 " " " "	PCB-1242	ND	15500	*	h	•	**	**	**		
PCB-1254 ND 15500 " 5000 " 12/19/05 " PCB-1260 ND 15500 " " " " " " Surrogate: Tetrachloro-meta-xylene 84.0 % 10-121 " " " "	PCB-1248		155000	16	50000	•	н	12/19/05	**		
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Surrogate: Tetrachloro-meta-xylene 84.0 % 10-121 " " " "				**	17	"	**	11	н		
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The results in this report apply to the samples unalyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed &



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: N/A
Project Manager: Jackie Doan

Lab ID: B512237 **Reported:** 12/20/05 11:33

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-F-4-04 (B512237-04) Soil	Sampled: 12/16/05 13:20	Receive	d: 12/16/05	15:50					
PCB-1016	ND	6940	ug/kg dry	2000	5120310	12/16/05	12/19/05	EPA 8082	
PCB-1221	ND	6940	"	11	11	"		11	
PCB-1232	ND	6940	н	н		•		•	
PCB-1242	ND	6940	•	"	n	н	**	n	
PCB-1248	14800	6940	*	11		н	**	#	
PCB-1254	ND	6940		n	11	19	**	н	
PCB-1260	ND	6940	n	u	н	н	11	n	
Surrogate: Tetrachloro-meta-xyl	ene	71.9 %	10-1	21	"	"	"	*	
Surrogate: Decachlorobiphenyl		95.8 %	10-1	27	"	"	**	~	
CSS-F-4-05 (B512237-05) Soil	Sampled: 12/16/05 13:25	Receive	d: 12/16/04	15.50					
Coo-F-4-03 (D312237-03) 3011	Sampled: 12/10/05 15.25	IXCCC14C	G. 14, 10, U.	15:50					
	ND	6410		2000	5120310	12/16/05	12/19/05	EPA 8082	
PCB-1016			ug/kg dry		5120310	12/16/05	12/19/05	EPA 8082	
PCB-1016 PCB-1221	ND	6410	ug/kg dry	2000					
PCB-1016 PCB-1221 PCB-1232	ND ND	6410 6410	ug/kg dry	2000	"	11	**	u	
PCB-1016 PCB-1221 PCB-1232 PCB-1242	ND ND ND	6410 6410 6410	ug/kg dry "	2000	11	19	H	п.	
PCB-1016 PCB-1221 PCB-1232 PCB-1242	ND ND ND ND	6410 6410 6410 6410	ug/kg dry " "	2000	11 11	11 11	H H	11 11 11	
PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248	ND ND ND ND 18400	6410 6410 6410 6410 6410	ug/kg dry " " "	2000	11 11 11	11 11 11	H H H	11 11 11	
PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 CB-1254	ND ND ND ND 18400 ND ND	6410 6410 6410 6410 6410	ug/kg dry " " " "	2000	11 11 11	" " "	11 11 11	11 11 11 11 11 11 11 11 11 11 11 11 11	

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:



(847) 808-7766 FAX (847) 808-7772

EQM

1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: N/A
Project Manager: Jackie Doan

Lab ID: B512237

Reported: 12/20/05 11:33

Percent Solids

TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
EMS-F-2-01 (B512237-01) Soil	Sampled: 12/16/05 08:00	Received	1: 12/16/	05 15:50					
% Solids	85.3	0.200	%	1	5120340	12/16/05	12/19/05	EPA 5035 7.5	
CSS-WW-3-02 (B512237-02) Soi	il Sampled: 12/16/05 13:	15 Receiv	ved: 12/1	16/05 15:50					
% Solids	82.2	0.200	%	1	5120340	12/16/05	12/19/05	EPA 5035 7.5	
CSS-WW-3-03 (B512237-03) Soi	il Sampled: 12/16/05 13:2	20 Receiv	ved: 12/1	16/05 15:50					
% Solids	80.5	0.200	%	1	5120340	12/16/05	12/19/05	EPA 5035 7.5	
CSS-F-4-04 (B512237-04) Soil	Sampled: 12/16/05 13:20	Received	: 12/16/0)5 15:50					
% Solids	72.0	0.200	%	ı	5120340	12/16/05	12/19/05	EPA 5035 7.5	
CSS-F-4-05 (B512237-05) Soil	Sampled: 12/16/05 13:25	Received	: 12/16/0	15 15:50					
% Solids	78.0	0.200	%	1	5120340	12/16/05	12/19/05	EPA 5035 7.5	

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Reviewed & Approved by:



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EQM

1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: N/A
Project Manager: Jackie Doan

Lab ID: B512237 **Reported:** 12/20/05 11:33

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5120310 - EPA 3550B										
Blank (5120310-BLK1)				Prepared	& Analyz	ed: 12/16/	05			
PCB-1016	ND	21.8	ug/kg wet							
PCB-1221	ND	21.8	*							
PCB-1232	ND	21.8	11							
PCB-1242	ND	21.8	н							
PCB-1248	ND	21.8	44							
PCB-1254	ND	21.8	**							
PCB-1260	ND	21.8	*							
Surrogate: Tetrachloro-meta-xylene	22.2			34.2		64.9	10-121			
Surrogate: Decachlorobiphenyl	24.2		"	34.2		70.8	10-127			
LCS (5120310-BS1)				Prepared	& Analyze	ed: 12/16/	05			
PCB-1016	68.8	25.0	ug/kg wet	84.3		81.6	14.4-123			
PCB-1260	57.7	25.0	**	84.3		68.4	12.2-132			
irrogate: Tetrachloro-meta-xylene	21.9		"	33.7		65.0	10-121			
Surrogate: Decachlorobiphenyl	21.8		"	33.7		64.7	10-127			
Matrix Spike (5120310-MS1)	Sour	ce: B5121	96-05	Prepared	& Analyze	ed: 12/16/	05			
PCB-1016	58.3	20.2	ug/kg wet		ND	69.2	10-112			
PCB-1260	54.3	20.2		84.2	5.71	57.7	10-124			
Surrogate: Tetrachloro-meta-xylene	16.8		"	33.7		49.9	10-121			
Surrogate: Decachlorobiphenyl	17.4		"	33.7		51.6	10-127			
Matrix Spike Dup (5120310-MSD1)	Sour	ce: B5121	96-05	Prepared	& Analyze	ed: 12/16/	05			
PCB-1016	54.7	25.0	ug/kg wet	84.5	ND	64.7	10-112	6.37	40	
PCB-1260	55.8	25.0	**	84.5	5.71	59.3	10-124	2.72	40	
Surrogate: Tetrachloro-meta-xylene	17.4		"	33.8		51.5	10-121			-,
Surrogate: Decachlorobiphenyl	17.2		"	33.8		50.9	10-127			

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & .
Approved by:



(847) 808-7766 FAX (847) 808-7772

EQM

1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: N/A
Project Manager: Jackie Doan

Lab ID: B512237

Reported: 12/20/05 11:33

Percent Solids - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5120340 - General Prep										
Blank (5120340-BLK1)				Prepared:	12/16/05	Analyzed	I: 12/19/05			
% Solids	ND	0.200	%							
Duplicate (5120340-DUP1)	So	urce: B51223	7-01	Prepared:	12/16/05	Analyzed	1: 12/19/05			
% Solids	86.7	0.200	%		85.3			1.63	20	

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:



(847) 808-7766 FAX (847) 808-7772

Project: OMC - Waukegan

Project Number: N/A Project Manager: Jackie Doan

Lab ID: B512237 Reported: 12/20/05 11:33

Notes and Definitions

015 One or more surrogate recoveries were above the laboratory established control limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

EQM

1800 Carillon Blvd.

Cincinnati, OH 45240

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

L This quality control measurement is below the laboratory established limit.

This quality control measurement is above the laboratory established limit. Н

The laboratory is not NELAP accredited for this analyte by the indicated matrix and method.

^^ The State of Illinois Accrediting Authority does not offer NELAP accreditation for this analyte by the indicated matrix and method.

Note: All analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

TestAmerica--Buffalo Grove, IL Wisconsin DNR Certification Lab ID: 999917160

TestAmerica--Buffalo Grove, IL NELAP Primary Accreditation: Illinois #100261

TestAmerica--Buffalo Grove, IL NELAP Secondary Accreditation: New Jersey #IL001

TestAmerica--Nashville, TN NELAP Secondary Accreditation: Illinois #200010

TestAmerica--Dayton, OH NELAP Secondary Accreditation: Illinois #200008

TestAmerica--Watertown, WI NELAP Primary Accreditation: Illinois #100453

TestAmerica--Watertown, WI Wisconsin DNR Certification Lab ID: 128053530



TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Approved by:

18C rillon Blvd Cincinnati, OH 45240 (513) 825-7500 $\mathbf{E}_{\mathbf{Q}}$

Environmental L. ality Management, Inc.

Chain of Custody Record

coc Tracking: **EQ-1117** 3

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Ken Braun at (262) 510-1667													
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Reporting/QA Requirements:	Tum Around Time (EXACT DUE DATE):	Time DATE):		Report To:		1	Chain	Chain of Custody Seal Numbers	eal Numbers				
							1						1

Distribution: White-Accompanies Shipment Pink-Project Files Yellow-Laboratory File

(847) 808-7766 FAX (847) 808-7772

20 December 2005

Lab ID: B512245

Jackie Doan EQM 1800 Carillon Blvd. Cincinnati, OH 45240

RE: OMC - Waukegan

Enclosed are the results of analyses for samples received by the laboratory on 12/19/05. The sample results relate only to the tested analytes of interest and to the sample as received by the laboratory. At the time of analysis, the laboratory was in compliance with current NELAP standards and held accreditation for all analyses performed unless noted by a qualifier. The laboratory's Illinois NELAP accreditation number is 100261.

This report can not be reproduced, except in full, without written approval from the laboratory. If you have any questions concerning this report, please feel free to contact Andy Johnson.

Sincerely,

TestAmerica Analytical Testing Corporation

Deborah Lowe Laboratory Director James Knapp

Quality Assurance Manager



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: N/A
Project Manager: Jackie Doan

Lab ID: B512245

Reported: 12/20/05 16:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CSS-NW-3-06	B512245-01	Soil	12/19/05 08:00	12/19/05 10:35
CSS-EW-3-07	B512245-02	Soil	12/19/05 08:05	12/19/05 10:35
CSS-EW-3-08	B512245-03	Soil	12/19/05 08:05	12/19/05 10:35
CSS-EW-6-09	B512245-04	Soil	12/19/05 08:10	12/19/05 10:35
CSS-WW-6-10	B512245-05	Soil	12/19/05 08:30	12/19/05 10:35
CSS-WW-8-11	B512245-06	Soil	12/19/05 08:50	12/19/05 10:35
CSS-SW-8-12	B512245-07	Soil	12/19/05 08:50	12/19/05 10:35
CSS-EW-8-13	B512245-08	Soil	12/19/05 08:40	12/19/05 10:35
CSS-F-6-14	B512245-09	Soil	12/19/05 08:30	12/19/05 10:35
CSS-F-8-15	B512245-10	Soil	12/19/05 08:50	12/19/05 10:35

Sample Receipt Notes

Please note that the chain of custody (COC) included with this report is considered part of the report. The data user should review any comments or notes made on the COC. Any receipt issues found by the laboratory that are not noted on the COC will be stated below.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

& Reviewed *nnroved by

Margaret Kniest For Andy Johnson, Project Manager

Page 1 of 10



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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: N/A Project Manager: Jackie Doan

Lab ID: B512245 Reported: 12/20/05 16:14

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - Buffalo Grove, IL

	Re	porting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-NW-3-06 (B512245-01) Soil	Sampled: 12/19/05 08:00	Recei	ived: 12/19	/05 10:35					QC
PCB-1016	ND	118	ug/kg dry	50	5120358	12/19/05	12/19/05	EPA 8082	
PCB-1221	ND	118	**	п	"	"	11	**	
PCB-1232	ND	118	11	и	н	*	11	"	
PCB-1242	ND	118	н	H	"	**	н	11	
PCB-1248	13100	4710	"	2000	"	**	12/20/05		
PCB-1254	ND	118		50	"		12/19/05	u	
PCB-1260	ND	118	**	*	"	"	Ħ	**	
Surrogate: Tetrachloro-meta-xylene		66.9 %	10-1	121	"	"	"	"	
Surrogate: Decachlorobiphenyl		64.8 %	10-1	127	"	"	*	"	
CSS-EW-3-07 (B512245-02) Soil	Sampled: 12/19/05 08:05	Recei	ived: 12/19	/05 10:35					QC
PCB-1016	ND	152	ug/kg dry	50	5120358	12/19/05	12/19/05	EPA 8082	
PCB-1221	ND	152	*	IP	"	H	n		
PCB-1232	ND	152			**	и	**	н	
PCB-1242	ND	152	"	**		**		**	
PCB-1248	54500	15200	**	5000	10	Ħ	12/20/05		
CB-1254	ND	152	н	50	**		12/19/05		
PCB-1260	ND	152	н	н	"	"	•	11	
Surrogate: Tetrachloro-meta-xylene		70.9 %	10-1	121	"	"	"	"	
Surrogate: Decachlorobiphenyl		74.9 %	10-1	127	"	"	"	"	
CSS-EW-3-08 (B512245-03) Soil	Sampled: 12/19/05 08:05	Recei	ived: 12/19	/05 10:35					O15, QC
PCB-1016	ND	133	ug/kg dry	50	5120358	12/19/05	12/19/05	EPA 8082	
PCB-1221	ND	133	11	"	11	a	"		
PCB-1232	ND	133	n	*	10	H	19	#	
PCB-1242	ND	133	**	10	**	11	n		
PCB-1248	765000 2	13000	It	80000	н	11	12/20/05	**	
PCB-1254	ND	133	14	50	**		12/19/05	n	
PCB-1260	ND	133	"	п	н	**	"	"	
Surrogate: Tetrachloro-meta-xylene		53.6 %	10-1	21	"	"	,,	"	
Surrogate: Decachlorobiphenyl		130 %	10-1		"	"	n	H	Н

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: N/A Project Manager: Jackie Doan

Lab ID: B512245 Reported: 12/20/05 16:14

Polychlorinated Biphenyls by EPA Method 8082 TestAmerica - Buffalo Grove, IL

r	- I CSUA	110110	a - Dull		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-EW-6-09 (B512245-04) Soil	Sampled: 12/19/05 08:10	Recei	ved: 12/19	/05 10:35					QC
PCB-1016	ND	137	ug/kg dry	50	5120358	12/19/05	12/19/05	EPA 8082	
PCB-1221	ND	137	**	**	*1	и	m	n	
PCB-1232	ND	137	11	**		"	**	"	
PCB-1242	ND	137	*				*		
PCB-1248	4670	1370	**	500		H	12/20/05	**	
PCB-1254	ND	137	н	50		•	12/19/05	•	
PCB-1260	ND	137		O O	H	11	н	n	
Surrogate: Tetrachloro-meta-xylene	,	70.4 %	10-1	21	"	"	u	"	
Surrogate: Decachlorobiphenyl		86.9 %	10-1	27	"	н	"	н	
CSS-WW-6-10 (B512245-05) Soil	Sampled: 12/19/05 08:36	Rece	ived: 12/1	0/05 10:35	;				QC
PCB-1016	ND	133	ug/kg dry	50	5120358	12/19/05	12/20/05	EPA 8082	
PCB-1221	ND	133	"	ŧI	"	n n	н	h	
PCB-1232	ND	133	•		*	*1		41	
PCB-1242	ND	133	**	17		*	**	**	
PCB-1248	444	133	11	11	*	•	H		
CB-1254	ND	133	н	19	u	**	11	41	
PCB-1260	ND	133	"	#	u	п	u	te	
Surrogate: Tetrachloro-meta-xylene		51.8 %	10-1	21	"	"	"	н	
Surrogate: Decachlorobiphenyl		75.4 %	10-1		"	n	n	•	
CSS-WW-8-11 (B512245-06) Soil	Sampled: 12/19/05 08:50	Rece	ived: 12/19	0/05 10:35	i				QC
PCB-1016	ND	31.1	ug/kg dry	10	5120358	12/19/05	12/20/05	EPA 8082	
PCB-1221	ND	31.1	Ħ	**	"	u	н	н	
PCB-1232	ND	31.1	**	"	19	н	u	п	
PCB-1242	ND	31.1	"	19	n	**	*1	**	
PCB-1248	51.6	31.1	n	**	H	**	**	41	
PCB-1254	ND	31.1	н	"	ff	ff.	"	*	
PCB-1260	ND	31.1	н	и	11	H	н	#	
Surrogate: Tetrachloro-meta-xylene		56.2 %	10-1	21	"	"	*	*	
Surrogate: Decachlorobiphenyl		76.9 %	10-1		"	"	*	•	
3 2		_							

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(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: N/A Project Manager: Jackie Doan Lab ID: B512245

Reported: 12/20/05 16:14

Polychlorinated Biphenyls by EPA Method 8082 TestAmerica - Buffalo Grove, IL

		eporting		5 0.00					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-SW-8-12 (B512245-07) Soil	Sampled: 12/19/05 08:50	Recei	ved: 12/19	05 10:35					QC
PCB-1016	ND	144	ug/kg dry	50	5120358	12/19/05	12/19/05	EPA 8082	
PCB-1221	ND	144	"	"		10	**	·	
PCB-1232	ND	144	и	"	•	11	**	п	
PCB-1242	ND	144		"	**	"	M	•	
PCB-1248	63400	28800		10000		"	12/20/05	"	
PCB-1254	ND	144	"	50	11	н	12/19/05	и	
PCB-1260	ND	144	"		u	u	11		
Surrogate: Tetrachloro-meta-xylene	е	72.4 %	10-	121	"	"	,,	"	
Surrogate: Decachlorobiphenyl		71.7%	10-	127	"	"	"	*	
CSS-EW-8-13 (B512245-08) Soil	Sampled: 12/19/05 08:40) Recei	ved: 12/19	/05 10:35					QC
PCB-1016	ND	158	ug/kg dry	50	5120358	12/19/05	12/19/05	EPA 8082	
PCB-1221	ND	158	10	11	u	н	11	н	
PCB-1232	ND	158	**	u	н	н	H	**	
PCB-1242	ND	158	**	19	11	н	11		
PCB-1248	1060	316	**	100	n	II .	12/20/05	*	
CB-1254	ND	158	**	50	"	и	12/19/05	н	
PCB-1260	ND	158	11	u	"	u	19		
Surrogate: Tetrachloro-meta-xylene	e	69.8 %	10-1	21	"	"	"	"	
Surrogate: Decachlorobiphenyl		76.0 %	10-1		"	"	*	~	
CSS-F-6-14 (B512245-09) Soil S	ampled: 12/19/05 08:30	Receive	d: 12/19/0	10:35					QC
PCB-1016	ND	138	ug/kg dry	50	5120358	12/19/05	12/19/05	EPA 8082	
PCB-1221	ND	138	11	11	u	u	10	"	
PCB-1232	ND	138	"	н	u	**	11	**	
PCB-1242	ND	138	,,	н	u	**	10	n	
PCB-1248	1700	554	•	200	11	II .	12/20/05	**	
PCB-1254	ND	138	•	50	u	"	12/19/05	•	
PCB-1260	ND	138	**	ш	н	11	и	н	
Surrogate: Tetrachloro-meta-xylene	?	69.8 %	10-1	21	"	"	"	"	

10-127

74.5 %

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Surrogate: Decachlorobiphenyl

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: N/A Project Manager: Jackie Doan

Lab ID: B512245 Reported: 12/20/05 16:14

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
CSS-F-8-15 (B512245-10) Soil	Sampled: 12/19/05 08:50	Received: 12/19/05 10:35							QC
PCB-1016	ND	24.9	ug/kg dry	10	5120358	12/19/05	12/20/05	EPA 8082	
PCB-1221	ND	24.9		u	н	н	11	n	
PCB-1232	ND	24.9	n	*		w	*	n	
PCB-1242	ND	24.9	"		**	"	Ħ	"	
PCB-1248	25.7	24.9	14	11	10	**	11	n	
PCB-1254	ND	24.9	11	u	**	н	н	H	
PCB-1260	ND	24.9	**	"	н	"	н	н	
Surrogate: Tetrachloro-meta-xylene		53.0 %	10-1	21	"	п	"	rr r	
Surrogate: Decachlorobiphenyl		68.9 %	10-1	27	*	"	*	*	

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EOM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: N/A Project Manager: Jackie Doan

Lab ID: B512245 Reported: 12/20/05 16:14

Percent Solids

TestAmerica - Buffalo Grove, IL

Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-NW-3-06 (B512245-01) Soil	Sampled: 12/19/05 08:00	Receiv	/ed: 12/1	9/05 10:35	_				
% Solids	86.7	0.200	%	1	5120352	12/19/05	12/20/05	EPA 5035 7.5	
CSS-EW-3-07 (B512245-02) Soil	Sampled: 12/19/05 08:05	Receiv	/ed: 12/1	9/05 10:35					
% Solids	82.3	0.200	%	1	5120352	12/19/05	12/20/05	EPA 5035 7.5	
CSS-EW-3-08 (B512245-03) Soil	Sampled: 12/19/05 08:05	Receiv	/ed: 12/1	9/05 10:35					
% Solids	94.1	0.200	%	1	5120352	12/19/05	12/20/05	EPA 5035 7.5	
CSS-EW-6-09 (B512245-04) Soil	Sampled: 12/19/05 08:10	Receiv	/ed: 12/1	9/05 10:35					
% Solids	81.3	0.200	%	1	5120352	12/19/05	12/20/05	EPA 5035 7.5	
CSS-WW-6-10 (B512245-05) Soil	Sampled: 12/19/05 08:3) Recei	ved: 12/	19/05 10:35					
% Solids	79.5	0.200	%	1	5120352	12/19/05	12/20/05	EPA 5035 7.5	
SS-WW-8-11 (B512245-06) Soil	Sampled: 12/19/05 08:50) Recei	ved: 12/	19/05 10:35					
% Solids	80.3	0.200	%	1	5120352	12/19/05	12/20/05	EPA 5035 7.5	
CSS-SW-8-12 (B512245-07) Soil	Sampled: 12/19/05 08:50	Receiv	ed: 12/1	9/05 10:35					
% Solids	78.9	0.200	%	l	5120352	12/19/05	12/20/05	EPA 5035 7.5	
CSS-EW-8-13 (B512245-08) Soil	Sampled: 12/19/05 08:40	Receiv	ed: 12/1	9/05 10:35					
% Solids	79.1	0.200	%	1	5120352	12/19/05	12/20/05	EPA 5035 7.5	
CSS-F-6-14 (B512245-09) Soil S	ampled: 12/19/05 08:30 I	Received	: 12/19/0	5 10:35					
% Solids	81.6	0.200	%	1	5120352	12/19/05	12/20/05	EPA 5035 7.5	

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: N/A
Project Manager: Jackie Doan

Lab ID: B512245

Reported: 12/20/05 16:14

Percent Solids

TestAmerica - Buffalo Grove, IL

		Reporting]
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-F-8-15 (B512245-10) Soil	Sampled: 12/19/05 08:50	Received	: 12/19/0	5 10:35					
% Solids	78.3	0.200	%	1	5120352	12/19/05	12/20/05	EPA 5035 7.5	

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Reviewed &

ed & Margaret Knied



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EOM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: N/A Project Manager: Jackie Doan Lab ID: B512245

Reported: 12/20/05 16:14

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control TestAmerica - Buffalo Grove, IL

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5120358 - EPA 3550B										
Blank (5120358-BLK1)				Prepared	: 12/19/05	Analyze	d: 12/20/05			
PCB-1016	ND	22.1	ug/kg wet							
PCB-1221	ND	22.1	*							
PCB-1232	ND	22.1	**							
PCB-1242	ND	22.1	#							
PCB-1248	ND	22.1	**							
PCB-1254	ND	22.1	•							
PCB-1260	ND	22.1	*							
Surrogate: Tetrachloro-meta-xylene	26.4		11	32.8		80.5	10-121			
Surrogate: Decachlorobiphenyl	31.9		н	32.8		97.3	10-127			
LCS (5120358-BS1)				Prepared	& Analyz	ed: 12/19/	05			
PCB-1016	82.4	25.0	ug/kg wet	84.3		97.7	14.4-123			
PCB-1260	77.7	25.0	4	84.3		92.2	12.2-132			
urrogate: Tetrachloro-meta-xylene	24.7		11	33.7		73.3	10-121			
Surrogate: Decachlorobiphenyl	29.5		"	33.7		87.5	10-127			
Matrix Spike (5120358-MS1)	So	urce: B5122	45-04	Prepared:	12/19/05	Analyze	1: 12/20/05			
PCB-1016	720	262	ug/kg dry	103	ND	699	10-112			Н
PCB-1260	226	26.2	**	103	ND	219	10-124			н
Surrogate: Tetrachloro-meta-xylene	31.7		"	41.0		77.3	10-121			
Surrogate: Decachlorobiphenyl	34.4		,,	41.0		83.9	10-127			
Matrix Spike Dup (5120358-MSD1)	So	urce: B5122	45-04	Prepared:	12/19/05	Analyzeo	i: 12/20/05			
PCB-1016	866	308	ug/kg dry	103	ND	841	10-112	18.4	40	Н .
PCB-1260	271	30.8	11	103	ND	263	10-124	18.1	40	Н
Surrogate: Tetrachloro-meta-xylene	37.4	<u>-</u>	*	41.0		91.2	10-121			
Surrogate: Decachlorobiphenyl	42.6			41.0		104	10-127			

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Margaret Kniest



(847) 808-7766 FAX (847) 808-7772

EQM

1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: N/A Project Manager: Jackie Doan Lab ID: B512245

Reported: 12/20/05 16:14

Percent Solids - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5120352 - General Prep										
Blank (5120352-BLK1)				Prepared:	12/19/05	Analyzed	: 12/20/05			
% Solids	ND	0.200	%					·		
Blank (5120352-BLK2)				Prepared:	12/19/05	Analyzed	: 12/20/05			
% Solids	ND	0.200	%							
Duplicate (5120352-DUP1)	So	urce: B51223	6-01	Prepared:	12/19/05	Analyzed	: 12/20/05			
% Solids	81.2	0.200	%		81.7			0.614	20	
Duplicate (5120352-DUP2)	So	urce: B51223	6-02	Prepared:	12/19/05	Analyzed	: 12/20/05			
% Solids	84.2	0.200	%		84.5			0.356	20	

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Approved by:



(847) 808-7766 FAX (847) 808-7772

Project: OMC - Waukegan

1800 Carillon Blvd. Project Number: N/A Lab ID: B512245 Cincinnati, OH 45240 Project Manager: Jackie Doan Reported: 12/20/05 16:14

Notes and Definitions

QC The result for one or more quality control measurements associated with this sample did not meet the laboratory and/or source

method acceptance criteria.

015 One or more surrogate recoveries were above the laboratory established control limits.

Analyte DETECTED DET

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

EQM

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

L This quality control measurement is below the laboratory established limit.

Н This quality control measurement is above the laboratory established limit.

The laboratory is not NELAP accredited for this analyte by the indicated matrix and method.

۸۸ The State of Illinois Accrediting Authority does not offer NELAP accreditation for this analyte by the indicated matrix and method.

Note: All analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

TestAmerica--Buffalo Grove, IL Wisconsin DNR Certification Lab ID: 999917160

TestAmerica--Buffalo Grove, IL NELAP Primary Accreditation: Illinois #100261

TestAmerica--Buffalo Grove, IL NELAP Secondary Accreditation: New Jersey #IL001

TestAmerica--Nashville, TN NELAP Secondary Accreditation: Illinois #200010

TestAmerica--Dayton, OH NELAP Secondary Accreditation: Illinois #200008

TestAmerica--Watertown, WI NELAP Primary Accreditation: Illinois #100453

TestAmerica--Watertown, WI Wisconsin DNR Certification Lab ID: 128053530



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Page 10 of 10



CHAIN OF CUSTODY REPORT

1380 Busch Parkway Buffalo Grove, IL 60089-4505 (847) 808-7766 FAX (847) 808-7772

140 E. n Road Oak Cree., WI 53154 (414) 570-9460 FAX (414) 570-9461

Client: Fram		Bill To:	Sime			TAT	T. STD. 4 DAY	Y 3 DAY 2 DAY	V (1 DAY) < 24 HRS.
Address: 1800 Carillen Bivel						00	<u> </u>		RESULTS M
						18. I	Received at laboratory	1	Supremor Transland
Report to: Jackie Dan Phone #: (5-13) 825-7500 E-mail: Jeleand Em. com Fax #: ()		State & Program:	USERA	Phone #: (Fax #: (8 0	Deliverable Package: ☐ STD ☐ Other		Delivery Method: GLA ဩ-Client □ Shipped □ Courier □
Project Name: OAC Aunt #2			# of Bottles Preservative Used	344				SAMPLE /	THIS SECTION FOR
Project #/PO#: Sampler: Ken Graun	TELOST, SECIEI	374	///8/	28.40.	7			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ABORATORY
1#	100 N / 100 N	YOUN YOUN	40en 0524 50NH 104 8588N	100 / 31/01 31/01		\ \ \	\ \ \		ID NUMBER
CSS-NW-3-06 PID:	14Ff65 800	;;		7		24-48	TAT	L	RS12245-01
CSS -EW - 3-07 PID:	508 596421	1:45) X	×	-		-	7 9
CSS ~ EW · 3 - 08	12/18/05 805	50:1		, X	х				£ 0-
CSS- EW - 6-09 PID:	18 -8/h	1:05		~	×				60
CSS-Wid-6-10	19695 350	50:1		~ X	×				50-
CSS - WW - 8-11	12/1/05 850	57		1 X	×				90-
C55 - 56J - 8-12- PID:	14968 853	17.68		1 7	X				Lo-
CSS-EW-8-13	14/02 840	150:1		·_ ×	×				90
CSS-F-6-14 PID:	14965 830	50:1		_ X	R				50-
- 9 - 15 PID:	950	50:1		~ X \	7	*			a)_
All Char Miles	RECEIVED // //	Total	ASSIST OF	HELMOUSHED (OH.	180	SPECEIVER	1	12/19/5
RELINQUISHED RE	RECEIVED CON	٥	Entre RE	RELINQUISHED		4140	RECEIVED		: :
COMMENTS: Please Cal preliminary	results to	KenBrun	4	1667		d			
								PAGE	OF

(847) 808-7766 FAX (847) 808-7772

22 December 2005

Lab ID: B512255

Jackie Doan EQM 1800 Carillon Blvd. Cincinnati, OH 45240

RE: OMC - Waukegan

Enclosed are the results of analyses for samples received by the laboratory on 12/19/05. The sample results relate only to the tested analytes of interest and to the sample as received by the laboratory. At the time of analysis, the laboratory was in compliance with current NELAP standards and held accreditation for all analyses performed unless noted by a qualifier. The laboratory's Illinois NELAP accreditation number is 100261.

This report can not be reproduced, except in full, without written approval from the laboratory. If you have any questions concerning this report, please feel free to contact Andy Johnson.

Sincerely,

TestAmerica Analytical Testing Corporation

Deborah Lowe Laboratory Director James Knapp

Quality Assurance Manager



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315 Project Manager: Jackie Doan Lab ID: B512255
Reported: 12/22/05 12:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EMS-P-0-16	B512255-01	Soil	12/19/05 11:00	12/19/05 15:19
EMS-P-0-17	B512255-02	Soil	12/19/05 11:00	12/19/05 15:19
BMS-P-0-18	B512255-03	Soil	12/19/05 11:15	12/19/05 15:19
BMS-P-0-19	B512255-04	Soil	12/19/05 11:15	12/19/05 15:19
CSS-SW-5-20	B512255-05	Soil	12/19/05 13:15	12/19/05 15:19
CSS-NW-5-21	B512255-06	Soil	12/19/05 13:00	12/19/05 15:19
CSS-NW-5-23	B512255-07	Soil	12/19/05 13:00	12/19/05 15:19
CSS-EW-5-24	B512255-08	Soil	12/19/05 13:10	12/19/05 15:19
CSS-F-6-25	B512255-09	Soil	12/19/05 13:15	12/19/05 15:19
CSS-NW-5-26	B512255-10	Soil	12/19/05 13:30	12/19/05 15:19
CSS-F-6-27	B512255-11	Soil	12/19/05 13:30	12/19/05 15:19

Sample Receipt Notes

Please note that the chain of custody (COC) included with this report is considered part of the report. The data user should review any omments or notes made on the COC. Any receipt issues found by the laboratory that are not noted on the COC will be stated below.

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ed & Andy Johnson



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EQM

1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512255

Reported: 12/22/05 12:03

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - Buffalo Grove, IL

		eporting	a - Duit		-,	 				
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method		Note
EMS-P-0-16 (B512255-01) Soil	Sampled: 12/19/05 11:00	Receive	ed: 12/19/0	5 15:19						019
PCB-1016	ND	140	ug/kg dry	50	5120374	12/20/05	12/20/05	EPA 8082		
PCB-1221	ND	140	н	11	н	11	н	U		
PCB-1232	ND	140	ıt	ч	н	ŧı	H	**		
PCB-1242	ND	140	**	*1	*1	11	"			
PCB-1248	440000	112000		40000	н	н	12/21/05	**		
PCB-1254	ND	140	**	50	*1	**	12/20/05	**		
PCB-1260	ND	140	"	*	"	,,	,	•		
Surrogate: Tetrachloro-meta-xylet	ne	60.0 %	10-1	21	"	"	"	"		
Surrogate: Decachlorobiphenyl		174 %	10-1	27	"	"	**	"	Н	
EMS-P-0-17 (B512255-02) Soil	Sampled: 12/19/05 11:00	Receive	ed: 12/19/0	5 15:19						015
PCB-1016	ND	139	ug/kg dry	50	5120374	12/20/05	12/20/05	EPA 8082		-
PCB-1221	ND	139	"	**	**	н	**			
PCB-1232	ND	139	н		11	91	11	11		
PCB-1242	ND	139		u	n	19	И	11		
PCB-1248	543000	139000	н	50000	н	19	12/21/05	н		
JB-1254	ND	139		50	**	н	12/20/05	**		
PCB-1260	ND	139	"	"	11	**	•			
Surrogate: Tetrachloro-meta-xylei	ne	59.3 %	10-1	21	,,	n	**	~		
Surrogate: Decachlorobiphenyl		165 %	10-1	27	"	n	"	*	Н	
BMS-P-0-18 (B512255-03) Soil	Sampled: 12/19/05 11:15	Receive	ed: 12/19/0	5 15:19						
PCB-1016	ND		ug/kg dry	10	5120374	12/20/05	12/21/05	EPA 8082		
PCB-1221	ND	27.2	H	11	"	"	н	"		
PCB-1232	ND	27.2	**	*	"	ч		11		
PCB-1242	ND	27.2		"	н			**		
PCB-1248	72.4	27.2	н	**	11	11	и			
PCB-1254	ND	27.2	н	*	10	**	,,	**		
PCB-1260	ND	27.2	**	**		"	u	и		
Surrogate: Tetrachloro-meta-xyler		65.4 %	10-1	21				,,		
Surrogate: letrachtoro-meta-yviel			[]-]							

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Andy Johnson



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EQM

1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512255

Reported: 12/22/05 12:03

Polychlorinated Biphenyls by EPA Method 8082 TestAmerica - Buffalo Grove, IL

								 	
Analyte	Result	leporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
BMS-P-0-19 (B512255-04) Soil	Sampled: 12/19/05 11:15	Receive	ed: 12/19/0	5 15:19					
PCB-1016	ND	26.4	ug/kg dry	10	5120374	12/20/05	12/21/05	EPA 8082	
PCB-1221	ND	26.4		**	**	•	*	н	
PCB-1232	ND	26.4	91	и	19	11	**	11	
PCB-1242	ND	26.4	10	"	**	11	н	н	
PCB-1248	ND	26.4	19	u	11	n	**	11	
PCB-1254	ND	26.4	н	u u	11	11	"	н	
PCB-1260	ND	26.4	**	tt	ш	**	н	H	
Surrogate: Tetrachloro-meta-xyle	ne	63.9 %	10-1	121	"	n	"	"	
Surrogate: Decachlorobiphenyl		77.8 %	10-1	127	n	"	"	u	
CSS-SW-5-20 (B512255-05) Soil		5 Recei	ved: 12/19/	05 15:19					
PCB-1016	ND	161	ug/kg dry	50	5120374	12/20/05	12/20/05	EPA 8082	
PCB-1221	ND	161	w	#	"	11	**	н	
PCB-1232	ND	161	н	14	"	11	11	**	
PCB-1242	ND	161	W .	н	"	11	**	r r	
PCB-1248	203	161	11	"	n	μ	"	,	
CB-1254	ND	161	**	10	н	11	и	**	
rCB-1260	ND	161	**		11	"	*	11	
Surrogate: Tetrachloro-meta-xyle	ne	75.1 %	10-1	21	"	"	"	"	
Surrogate: Decachlorobiphenyl		83.7%	10-1	27	"	"	"	"	
CSS-NW-5-21 (B512255-06) Soi	1 Sampled: 12/19/05 13:0	0 Recei	ved: 12/19	/05 15:19					
PCB-1016	ND		ug/kg dry	10	5120374	12/20/05	12/21/05	EPA 8082	·
PCB-1221	ND	31.6	11	"	11	"	11		
PCB-1232	ND	31.6		91	**	**	11	u	
PCB-1242	ND	31.6	*		"				
PCB-1248	108	31.6			**	"	**	17	
PCB-1254	ND	31.6	•	*1	и	II .	н		
PCB-1260	ND	31.6	**		11		н	н	
Surrogate: Tetrachloro-meta-xyle	nρ	55.5 %	10-1	121	"	"	"	"	–
Darroguie, Ten demoro-mend-Ayre		20.0 /0	10-1						

64.9 %

10-127

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Surrogate: Decachlorobiphenyl

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EQM

1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512255

Reported: 12/22/05 12:03

Polychlorinated Biphenyls by EPA Method 8082 TestAmerica - Buffalo Grove, IL

	Re	porting					 		
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
CSS-NW-5-23 (B512255-07) Soil	Sampled: 12/19/05 13:00	Recei	ived: 12/19	/05 15:19					
PCB-1016	ND	164	ug/kg dry	50	5120374	12/20/05	12/20/05	EPA 8082	
PCB-1221	ND	164	н	"	U	n	II .	n	
PCB-1232	ND	164	"	**	**	"	н	U	
PCB-1242	ND	164	"	"	"	"	"	n	
PCB-1248	593	164		**	**	"	H	*1	
PCB-1254	ND	164	**	**	"	*	**	•	
PCB-1260	ND	164		,	**			*	
Surrogate: Tetrachloro-meta-xylene		49.0 %	10-1	21	"	"	"	"	
Surrogate: Decachlorobiphenyl		64.2 %	10-1	27	"	"	"	n	
CSS-EW-5-24 (B512255-08) Soil	Sampled: 12/19/05 13:10	Recei	ved: 12/19	/05 15:19					
PCB-1016	ND	161	ug/kg dry	50	5120374	12/20/05	12/20/05	EPA 8082	
PCB-1221	ND	161	"	н	"	"	н	и	
PCB-1232	ND	161	11	11	1*	Ħ	H	II .	
PCB-1242	ND	161	**	н	**	R	н	n .	
PCB-1248	276	161	"	**	**	"	ũ	**	
CB-1254	ND	161	"	11	**	"	н	**	
PCB-1260	ND	161	н	11		"	"	"	
Surrogate: Tetrachloro-meta-xylene		59.1 %	10-1	21	"	"	"	n	
Surrogate: Decachlorobiphenyl		72.7 %	10-1	27	"	"	"	n	
CSS-F-6-25 (B512255-09) Soil Sa	ampled: 12/19/05 13:15	Receive	d: 12/19/05	15:19					
PCB-1016	ND	163	ug/kg dry	50	5120374	12/20/05	12/20/05	EPA 8082	
PCB-1221	ND	163	11	11	11	н	11	19	
PCB-1232	ND	163	14	11	n	11	.,	19	
PCB-1242	ND	163	"	н	"	**		u	
PCB-1248	3500	3260	11	1000	11	•	12/21/05	н	
PCB-1254	ND	163	II.	50	II .	11	12/20/05		
PCB-1260	ND	163						"	
Surrogate: Tetrachloro-meta-xylene		56.1 %	10-1	21	"	"	"	*	
Surrogate: Decachlorobiphenyl	•	66.0 %	10-1	27	"	"	"	*	

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Andy Johnson



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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B512255 Reported: 12/22/05 12:03

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - Buffalo Grove, IL

Analyte	F Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-NW-5-26 (B512255-10) Soil	Sampled: 12/19/05 13:3	0 Recei	ved: 12/19	/05 15:19					
PCB-1016	ND	159	ug/kg dry	50	5120374	12/20/05	12/20/05	EPA 8082	
PCB-1221	ND	159	•	*	н		**	#1	
PCB-1232	ND	159	*	н	19	н	**	**	
PCB-1242	ND	159	**	19	U	16	"	11	
PCB-1248	48200	31900	**	10000	**		12/21/05	11	
PCB-1254	ND	159	11	50	11	11	12/20/05	"	
PCB-1260	ND	159	*	0		**	•		
Surrogate: Tetrachloro-meta-xylene	!	69.3 %	10-1	21	"	"	~	N	
Surrogate: Decachlorobiphenyl		84.9 %	10-1	27	"	*	*	*	
CSS-F-6-27 (B512255-11) Soil Sa	ampled: 12/19/05 13:30	Receive	d: 12/19/05	15:19					
PCB-1016	ND	162	ug/kg dry	50	5120374	12/20/05	12/20/05	EPA 8082	
PCB-1221	ND	162	10	н	III	II	*	Ħ	
PCB-1232	ND	162	11	п	U	19	•	11	
PCB-1242	ND	162	11	n	III	II	•	It	
PCB-1248	32200	16200	11	5000	11	10	12/21/05	11	
CB-1254	ND	162	11	50	н	п	12/20/05	11	
PCB-1260	ND	162	19	н	u	н	11	n	
Surrogate: Tetrachloro-meta-xylene	,	65.5 %	10-1	21	"	"	"	"	
Surrogate: Decachlorobiphenyl		80.0 %	10-1		,,	"	"	**	

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Approved by:



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EQM

1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512255

Reported: 12/22/05 12:03

Percent Solids

TestAmerica - Buffalo Grove, IL

		eporting							.,
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EMS-P-0-16 (B512255-01) Soil	Sampled: 12/19/05 11:00	Received	l: 12/19.	05 15:19					
% Solids	89.1	0.200	%	1	5120364	12/19/05	12/20/05	EPA 5035 7.5	
EMS-P-0-17 (B512255-02) Soil	Sampled: 12/19/05 11:00	Received	l: 12/19	/05 15:19					
% Solids	89.8	0.200	%	1	5120364	12/19/05	12/20/05	EPA 5035 7.5	
BMS-P-0-18 (B512255-03) Soil	Sampled: 12/19/05 11:15	Received	l: 12/19	05 15:19					
% Solids	91.8	0.200	%	1	5120364	12/19/05	12/20/05	EPA 5035 7.5	
BMS-P-0-19 (B512255-04) Soil	Sampled: 12/19/05 11:15	Received	i: 12/19	/05 15:19					
% Solids	94.6	0.200	%	1	5120364	12/19/05	12/20/05	EPA 5035 7.5	
CSS-SW-5-20 (B512255-05) Soil	Sampled: 12/19/05 13:15	Receive	ed: 12/1	9/05 15:19					
% Solids	77.5	0.200	%	3	5120364	12/19/05	12/20/05	EPA 5035 7.5	
`SS-NW-5-21 (B512255-06) Soil	Sampled: 12/19/05 13:0	0 Receiv	ed: 12/1	9/05 15:19					
% Solids	79.0	0.200	%	l	5120364	12/19/05	12/20/05	EPA 5035 7.5	
CSS-NW-5-23 (B512255-07) Soil	Sampled: 12/19/05 13:0	0 Receiv	ed: 12/1	9/05 15:19					_
% Solids	76.0	0.200	%	1	5120364	12/19/05	12/20/05	EPA 5035 7.5	
CSS-EW-5-24 (B512255-08) Soil	Sampled: 12/19/05 13:10	Receive	ed: 12/1	9/05 15:19				_	_
% Solids	77.4	0.200	%	1	5120364	12/19/05	12/20/05	EPA 5035 7.5	
CSS-F-6-25 (B512255-09) Soil	Sampled: 12/19/05 13:15	Received	: 12/19/0	5 15:19					
% Solids	76.6	0.200	%	1	5120364	12/19/05	12/20/05	EPA 5035 7.5	

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Andy Johnson, Project Manager

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512255 Reported: 12/22/05 12:03

Percent Solids

TestAmerica - Buffalo Grove, IL

Analyte	F Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-NW-5-26 (B512255-10) So	il Sampled: 12/19/05 13:3	0 Receiv	/ed: 12/1	9/05 15:19					
% Solids	78.4	0.200	%	1	5120364	12/19/05	12/20/05	EPA 5035 7.5	
CSS-F-6-27 (B512255-11) Soil	Sampled: 12/19/05 13:30	Received	: 12/19/0	5 15:19					
% Solids	77.3	0.200	%	1	5120364	12/19/05	12/20/05	EPA 5035 7.5	

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Andy Johnson, Project Manager



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1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512255

Reported: 12/22/05 12:03

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5120374 - EPA 3550B										
Blank (5120374-BLK1)				Prepared	& Analyz	ed: 12/20/	05			
PCB-1016	ND	25.0	ug/kg wet							
PCB-1221	ND	25.0								
PCB-1232	ND	25.0	,							
PCB-1242	ND	25.0								
PCB-1248	ND	25.0	н							
PCB-1254	ND	25.0	**							
PCB-1260	ND	25.0	•							
Surrogate: Tetrachloro-meta-xylene	26.8		<i>"</i>	32.8		81.7	10-121			
Surrogate: Decachlorobiphenyl	28.0		*	32.8		85.4	10-127			
LCS (5120374-BS1)				Prepared	& Analyze	ed: 12/20/	05			
PCB-1016	61.4	25.0	ug/kg wet	85.3	<u>-</u> _	72.0	14.4-123			
PCB-1260	49.8	25.0	*	85.3		58.4	12.2-132			
rrogate: Tetrachloro-meta-xylene	20.7		n	34.1		60.7	10-121			
Surrogate: Decachlorobiphenyl	21.4		"	34.1		62.8	10-127			
Matrix Spike (5120374-MS1)	Soi	ırce: B5122	55-04	Prepared	& Analyze	ed: 12/20/	05			
PCB-1016	58.7	26.4	ug/kg dry	90.6	ND	64.8	10-112			
PCB-1260	52.1	26.4	"	90.6	ND	57.5	10-124			
Surrogate: Tetrachloro-meta-xylene	19.3		"	36.3		53.2	10-121			
Surrogate: Decachlorobiphenyl	22.4		H	36.3		61.7	10-127			
Matrix Spike Dup (5120374-MSD1)	Sou	ırce: B5122	55-04	Prepared	& Analyze	ed: 12/20/	05			
PCB-1016	48.9	26.4	ug/kg dry	87.2	ND	56.1	10-112	18.2	40	
PCB-1260	45.6	26.4	**	87.2	ND	52.3	10-124	13.3	40	
Surrogate: Tetrachloro-meta-xylene	16.2		"	34.9		46.4	10-121			
Surrogate: Decachlorobiphenyl	18.3		~	34.9		52.4	10-127			

TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Andy Johnson, Project Manager

Page 8 of 10



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ċQM

1800 Carillon Blvd.

Cincinnati, OH 45240

Project: OMC - Waukegan

Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512255

Reported: 12/22/05 12:03

Percent Solids - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
			Cilita	<u> </u>	· · · · · ·	701120	Cinito	100	~	
Batch 5120364 - General Prep										
Blank (5120364-BLK1)				Prepared:	12/19/05	Analyzed:	12/20/05			
% Solids	ND	0.200	%							
Blank (5120364-BLK2)				Prepared:	12/19/05	Analyzed:	12/20/05			
% Solids	ND	0.200	%					· · · · ·		
Duplicate (5120364-DUP1)	So	urce: B51218	6-10	Prepared:	12/19/05	Analyzed:	12/20/05			
% Solids	87.2	0.200	%		86.6			0.690	20	
Duplicate (5120364-DUP2)	So	urce: B51225	2-01	Prepared:	12/19/05	Analyzed:	12/20/05			
% Solids	80.6	0.200	%		76.4			5.35	20	

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:

Andy Johnson, Project Manager

Page 9 of 10



(847) 808-7766 FAX (847) 808-7772

Project: OMC - Waukegan

1800 Carillon Blvd.Project Number: 10315Lab ID: B512255Cincinnati, OH 45240Project Manager: Jackie DoanReported: 12/22/05 12:03

Notes and Definitions

One or more surrogate recoveries were above the laboratory established control limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

≟0M

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

L This quality control measurement is below the laboratory established limit.

H This quality control measurement is above the laboratory established limit.

The laboratory is not NELAP accredited for this analyte by the indicated matrix and method.

^^ The State of Illinois Accrediting Authority does not offer NELAP accreditation for this analyte by the indicated matrix and method.

Note: All analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

TestAmerica--Buffalo Grove, IL Wisconsin DNR Certification Lab ID: 999917160

TestAmerica--Buffalo Grove, IL NELAP Primary Accreditation: Illinois #100261

TestAmerica--Buffalo Grove, IL NELAP Secondary Accreditation: New Jersey #IL001

TestAmerica--Nashville, TN NELAP Secondary Accreditation: Illinois #200010

"estAmerica--Dayton, OH NELAP Secondary Accreditation: Illinois #200008

TestAmerica--Watertown, WI NELAP Primary Accreditation: Illinois #100453

TestAmerica--Watertown, WI Wisconsin DNR Certification Lab ID: 128053530



TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:

Andy Johnson, Project Manager

Page 10 of 10



CHAIN OF CUSTODY REPORT

1380 Busch Parkway Buffalo Grove, IL 60089-4505 (847) 808-7766 FAX (847) 808-7772

140 E. l. n Road Oak Cree. // 53154 (414) 570-9460 FAX (414) 570-9461

Client: EQM	Bill To: Same	TAT: STD. 4 DAY	3 DAY 2 DAY (DAY < 24 HRS.
Address: 1800 Carillar Blud.	Address:	105° YES - TAT is critical ON - TAT is not critical	DATE RESOLTS NI 1 1/21/05
Cincinnati OH 45240		TEMPERATURE UPON HE	Riction 4/10/30
Report to: Idean Degu. com Fax #: (1)	State & Phone #: () Frogram: USS'A Fax #: ()	Deliverable Package Needed: ☐ STD ☐ Other	Needad: Air Bill No.
Project: OMC Plants C	# of Bottles		/sample /
Sampler: Ken Braw	Preservative Used	/ / / / / / / / / / / / /	CONTROL
र्थ हिंदि	5 0 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	/ / / / / Jd/kL/ /	%/%/ LABORATORY
LD ID, LOCATION / &&/	1/01/01/05/04/04/04/04/04/04/04/04/04/04/04/04/04/	**************************************	(%) ID NUMBER
		T.	↓
l	λο; (×) × (×) 24.	48 hr 1AT hot	BS12255-01
2 BMS-1-0-17 PMP 12/19/05 1100	X - X	<u> </u>	405
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	~	-	
PID:	1	Clean	96
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1 L	X -		-0,k
1 (55-11/4-5-23 PM. 149/6 (37)	X - 7		ç
1 1	***		-08
9 CSS-F-6-25 on. 12/9/6 121	× - >		79.6
į.			
(4) 19-52 (4) (4) (4) (4) (5)	X X X	→	10
RELINGUISHED 1 14M/OS RECEIVED, " KUNNELLIN JOHN 11330 M.	The County of Meaning of the County	THEORINED /	12/1/2/85
	DATE RELINQUISHED	DATE RECEIVED	DATE
- 1	TIME	78.66	18.87
COMMENTS: Please call prehimmy results to	Kon Bough at (262) 510-1667		
	1		PAGE / OF /

(847) 808-7766 FAX (847) 808-7772

27 December 2005

Lab ID: B512272

Jackie Doan EQM 1800 Carillon Blvd. Cincinnati, OH 45240

RE: OMC - Waukegan

Enclosed are the results of analyses for samples received by the laboratory on 12/20/05. The sample results relate only to the tested analytes of interest and to the sample as received by the laboratory. At the time of analysis, the laboratory was in compliance with current NELAP standards and held accreditation for all analyses performed unless noted by a qualifier. The laboratory's Illinois NELAP accreditation number is 100261.

This report can not be reproduced, except in full, without written approval from the laboratory. If you have any questions concerning this report, please feel free to contact Andy Johnson.

Sincerely,

TestAmerica Analytical Testing Corporation

Deborah Lowe

Laboratory Director

James Knapp

Quality Assurance Manager



(847) 808-7766 FAX (847) 808-7772

EQM Project: OMC - Waukegan

1800 Carillon Blvd.Project Number: 10315Lab ID: B512272Cincinnati, OH 45240Project Manager: Jackie DoanReported: 12/27/05 15:53

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CSS-F-2-28	B512272-01	Soil	12/20/05 11:45	12/20/05 15:40
CSS-F-2-29	B512272-02	Soil	12/20/05 11:45	12/20/05 15:40
CSS-F-2-30	B512272-03	Soil	12/20/05 14:10	12/20/05 15:40
CSS-F-2-31	B512272-04	Soil	12/20/05 14:15	12/20/05 15:40
CSS-F-2-32	B512272-05	Soil	12/20/05 14:15	12/20/05 15:40

Sample Receipt Notes

Please note that the chain of custody (COC) included with this report is considered part of the report. The data user should review any comments or notes made on the COC. Any receipt issues found by the laboratory that are not noted on the COC will be stated below.

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:

by:



(847) 808-7766 FAX (847) 808-7772

£QM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512272 **Reported:** 12/27/05 15:53

Polychlorinated Biphenyls by EPA Method 8082 TestAmerica - Buffalo Grove, IL

	Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
PCB-1221 ND 132 " " " " " " " " PCB-1232 ND 132 " " " " " " " " " " " PCB-1242 ND 132 " " " " " " " " " " " " " " " PCB-1248 1680 1320 " 500 " " 12/21/05 " PCB-1254 ND 132 " " " " " " " " " " " " " " " " " " "	CSS-F-2-28 (B512272-01) Soil	Sampled: 12/20/05 11:45	Receive	d: 12/20/0	5 15:40					
PCB-1232 ND 132 " " " " " " PCB-1242 ND 132 " " " " " " " " " PCB-1248 1680 1320 " 500 " " 12/21/05 " PCB-1254 ND 132 " " " 12/21/05 " PCB-121/05 " " 12/21/05 " " 12/21/05 " " 12/21/05 "	PCB-1016	ND	132	ug/kg dry	50	5120374	12/20/05	12/21/05	EPA 8082	
PCB-1242 ND 132 " " " " " " PCB-1248 1680 1320 500 " 12/21/05 PCB-1246 ND 132 " 50 " 12/21/05 PCB-121/05 PCB-1260 ND 132 " " " 12/21/05 PCB-121/05 PCB-1	PCB-1221	ND	132	*	"	19	ij	11	"	
PCB-1248	PCB-1232	ND	132	**	"	"	"	u	"	
PCB-1264 ND 132 S0 " 12/21/05 PCB-1260 ND 132 " " " " " " " "	PCB-1242	ND	132	n n	"	••	**	**		
PCB-1260 ND 132 " " " " " " " " " " " " "	PCB-1248	1680	1320	tt	500	**	**	12/21/05	11	
Surrogate: Tetrachloro-meta-xylene 73.1 % 10-121 " " " " " " " " " " " "	PCB-1254	ND	132	**	50		"	12/21/05	н	
Surrogate: Decachlorobiphenyl 76.9 % 10-127 " " " " " " " " " " "	PCB-1260	ND	132	"	"	**	**	#	•	
CCSS-F-2-29 (B512272-02) Soil Sampled: 12/20/05 11:45 Received: 12/20/05 15:40 PCB-1016	Surrogate: Tetrachloro-meta-xyl	ene	73.1 %	10-	121	"	"	"	"	
PCB-1016 ND 133 ug/kg dry 50 5120374 12/20/05 12/21/05 EPA 8082 PCB-1221 ND 133 " " " " " " " " " " PCB-1232 ND 133 " " " " " " " " " " " " " " " " " "	-		76.9 %	10-	127	"	,,	"	JI	
PCB-1221 ND 133	CSS-F-2-29 (B512272-02) Soil	Sampled: 12/20/05 11:45	Receive	d: 12/20/0	5 15:40					
PCB-1221 ND 133 " <th< td=""><td>PCB-1016</td><td>ND</td><td>133</td><td>ug/kg dry</td><td>50</td><td>5120374</td><td>12/20/05</td><td>12/21/05</td><td>EPA 8082</td><td></td></th<>	PCB-1016	ND	133	ug/kg dry	50	5120374	12/20/05	12/21/05	EPA 8082	
PCB-1242 ND 133 "	PCB-1221	ND	133	**	н	н	11		•	
PCB-1248	PCB-1232	ND	133	**	H	"	II .	11	11	
TB-1254 ND 133 S0 " 12/21/05 " PCB-1260 ND 133 " " " " " " " " "	PCB-1242	ND	133	н	11	**	H	н	u	
PCB-1260 ND 133 " " " " " " " " " " " " " " " " " "	PCB-1248	4010	1330	"	500	**	**	12/21/05	**	
Surrogate: Tetrachloro-meta-xylene 77.7 % 10-121 " " " " " " Surrogate: Decachlorobiphenyl 77.7 % 10-127 " " " " " " CSS-F-2-30 (B512272-03) Soil Sampled: 12/20/05 14:10 Received: 12/20/05 15:40 PCB-1016 ND 32.1 ug/kg dry 10 5120374 12/20/05 12/22/05 EPA 8082 PCB-1221 ND 32.1 " " " " " " " " " " PCB-1232 ND 32.1 " " " " " " " " " PCB-1242 ND 32.1 " " " " " " " " " " PCB-1248 ND 32.1 " " " " " " " " " " " " " PCB-1254 ND 32.1 " " " " " " " " " " " " " " " PCB-1260 ND 32.1 " " " " " " " " " " " " " " " " Surrogate: Tetrachloro-meta-xylene 55.7 % 10-121 " " " " " " " " "	CB-1254	ND	133	"	50			12/21/05	"	
Surrogate: Decachlorobiphenyl 77.7 % 10-127 "	PCB-1260	ND	133	**		"	**	"	н	
Surrogate: Decachlorobiphenyl 77.7 % 10-127 " " " " " " CSS-F-2-30 (B512272-03) Soil Sampled: 12/20/05 14:10 Received: 12/20/05 15:40 PCB-1016 ND 32.1 ug/kg dry 10 5120374 12/20/05 12/22/05 EPA 8082 PCB-1221 ND 32.1 " " " " " " " " " " " " PCB-1232 ND 32.1 " " " " " " " " " " PCB-1242 ND 32.1 " " " " " " " " " " " PCB-1248 ND 32.1 " " " " " " " " " " " " " " PCB-1254 ND 32.1 " " " " " " " " " " " " " " " PCB-1260 ND 32.1 " " " " " " " " " " " " " " " " Surrogate: Tetrachloro-meta-xylene 55.7 % 10-121 " " " " " " " " " " " " " "	Surrogate: Tetrachloro-meta-xyl	ene	77.7 %	10-	121	"	"	"	"	
PCB-1016 ND 32.1 ug/kg dry 10 5120374 12/20/05 12/22/05 EPA 8082 PCB-1221 ND 32.1 " " " " " " " " " " " " " " " " " " "			77.7 %	10-1	27	"	"	**	H	
PCB-1221 ND 32.1 " <t< td=""><td>CSS-F-2-30 (B512272-03) Soil</td><td>Sampled: 12/20/05 14:10</td><td>Receive</td><td>d: 12/20/0</td><td>5 15:40</td><td></td><td></td><td></td><td></td><td></td></t<>	CSS-F-2-30 (B512272-03) Soil	Sampled: 12/20/05 14:10	Receive	d: 12/20/0	5 15:40					
PCB-1232 ND 32.1 " " " " " " " " " " " " " " " " " " "	PCB-1016	ND	32.1	ug/kg dry	10	5120374	12/20/05	12/22/05	EPA 8082	
PCB-1242 ND 32.1 " <t< td=""><td>PCB-1221</td><td>ND</td><td>32.1</td><td></td><td>n n</td><td>19</td><td>н</td><td>**</td><td>н</td><td></td></t<>	PCB-1221	ND	32.1		n n	19	н	**	н	
PCB-1248 ND 32.1 " <t< td=""><td>PCB-1232</td><td>ND</td><td>32.1</td><td>"</td><td>**</td><td>"</td><td>II .</td><td>11</td><td>и</td><td></td></t<>	PCB-1232	ND	32.1	"	**	"	II .	11	и	
PCB-1254 ND 32.1 " <t< td=""><td>PCB-1242</td><td>ND</td><td>32.1</td><td>н</td><td></td><td>**</td><td>н</td><td>u</td><td>n .</td><td></td></t<>	PCB-1242	ND	32.1	н		**	н	u	n .	
PCB-1260 ND 32.1 " <t< td=""><td>PCB-1248</td><td>ND</td><td>32.1</td><td>**</td><td>n</td><td>11</td><td>11</td><td>*1</td><td>**</td><td></td></t<>	PCB-1248	ND	32.1	**	n	11	11	*1	**	
Surrogate: Tetrachloro-meta-xylene 55.7 % 10-121 " " " "	PCB-1254	ND	32.1	н	n	**	u	11	11	
Surrogale. Tetrachioro-meta-xytene 55.7 76 10-121	PCB-1260	ND	32.1	11	**	н	11	"	н	
· · · · · · · · · · · · · · · · · · ·	Surrogate: Tetrachloro-meta-xyl	ene	55.7 %	10-1	121	"	н	"	"	
	-		64.3 %	10-1	27	"	"	*	~	

TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Andy Johnson, Project Manager

Page 2 of 7



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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512272 **Reported:** 12/27/05 15:53

Polychlorinated Biphenyls by EPA Method 8082 TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-F-2-31 (B512272-04) Soil	Sampled: 12/20/05 14:15	Receive	d: 12/20/05	15:40					
PCB-1016	ND	31.9	ug/kg dry	10	5120374	12/20/05	12/22/05	EPA 8082	
PCB-1221	ND	31.9	U	и	н		**		
PCB-1232	ND	31.9	•	u	"	"	**	11	
PCB-1242	ND	31.9	**	11	u	II .	11	**	
PCB-1248	ND	31.9		n	**	rt .	11	n .	
PCB-1254	ND	31.9	•	"	н	*	и	u	
PCB-1260	ND	31.9			**		н	11	
Surrogate: Tetrachloro-meta-xyler		60.0 %	10-1	121	"	"	"	"	
Surrogate: Decachlorobiphenyl		68.5 %	10-1	127	"	"	~	"	
CSS-F-2-32 (B512272-05) Soil	Sampled: 12/20/05 14:15	Receive	d: 12/20/0	5 15:40					
PCB-1016	ND	31.8	ug/kg dry	10	5120374	12/20/05	12/22/05	EPA 8082	
PCB-1221	ND	31.8		н		**	**	**	
PCB-1232	ND	31.8	н	**	**	**	и	•	
PCB-1242	ND	31.8	11	**	n	10	11	u	
PCB-1248	ND	31.8	n	"	H	u	"	**	
CB-1254	ND	31.8	**	u.	•			11	
rCB-1260	ND	31.8		n		**	11	п	
Surrogate: Tetrachloro-meta-xyler		70.8 %	10-1	121	"	"	"	"	
Surrogate: Decachlorobiphenyl		85.6 %	10-1	27	"	"	"	,	

TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Andy Johnson, Project Manager

Page 3 of 7



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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512272

Reported: 12/27/05 15:53

Percent Solids

TestAmerica - Buffalo Grove, IL

Analyte	I Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
CSS-F-2-28 (B512272-01) Soil	Sampled: 12/20/05 11:45	Received	: 12/20/0	05 15:40					
% Solids	94.7	0.200	%	1	5120410	12/20/05	12/20/05	EPA 5035 7.5	
CSS-F-2-29 (B512272-02) Soil	Sampled: 12/20/05 11:45	Received	: 12/20/0)5 15:40 					
% Solids	94.2	0.200	%	1	5120410	12/20/05	12/20/05	EPA 5035 7.5	
CSS-F-2-30 (B512272-03) Soil	Sampled: 12/20/05 14:10	Received	: 12/20/0)5 15:40					
% Solids	77.9	0.200	%	1	5120410	12/20/05	12/20/05	EPA 5035 7.5	
CSS-F-2-31 (B512272-04) Soil	Sampled: 12/20/05 14:15	Received	: 12/20/0)5 15:40					
% Solids	78.4	0.200	%	l	5120410	12/20/05	12/20/05	EPA 5035 7.5	
CSS-F-2-32 (B512272-05) Soil	Sampled: 12/20/05 14:15	Received	: 12/20/0	05 15:40					
% Solids	78.6	0.200	%	1	5120410	12/20/05	12/20/05	EPA 5035 7.5	

TestAmerica - Buffalo Grove, IL

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Andy Johnson, Project Manager

Page 4 of 7



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512272

Reported: 12/27/05 15:53

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5120374 - EPA 3550B										
Blank (5120374-BLK1)				Prepared	& Analyzo	ed: 12/20/	05			
PCB-1016	ND	25.0	ug/kg wet							
PCB-1221	ND	25.0	**							
PCB-1232	ND	25.0								
PCB-1242	ND	25.0								
PCB-1248	ND	25.0	*							
PCB-1254	ND	25.0								
PCB-1260	ND	25.0								
Surrogate: Tetrachloro-meta-xylene	26.8		"	32.8		81.7	10-121			
Surrogate: Decachlorobiphenyl	28.0		"	32.8		85.4	10-127			
LCS (5120374-BS1)				Prepared	& Analyzo	ed: 12/20/	05			
PCB-1016	61.4	25.0	ug/kg wet	85.3		72.0	14.4-123			
PCB-1260	49.8	25.0	11	85.3		58.4	12.2-132			
urrogate: Tetrachloro-meta-xylene	20.7		"	34.1		60.7	10-121	<u>-</u>		
urrogate: Decachlorobiphenyl	21.4		"	34.1		62.8	10-127			
Matrix Spike (5120374-MS1)	So	ırce: B5122	55-04	Prepared	& Analyze	ed: 12/20/	05			
PCB-1016	58.7	26.4	ug/kg dry	90.6	ND	64.8	10-112			
PCB-1260	52.1	26.4	**	90.6	ND	57.5	10-124			
Surrogate: Tetrachloro-meta-xylene	19.3		<i>n</i>	36.3		53.2	10-121			
Surrogate: Decachlorobiphenyl	22.4			36.3		61.7	10-127			
Matrix Spike Dup (5120374-MSD1)	Sou	ırce: B5122	55-04	Prepared	& Analyze	ed: 12/20/	05			
PCB-1016	48.9	26.4	ug/kg dry	87.2	ND	56.1	10-112	18.2	40	
PCB-1260	45.6	26.4	н	87.2	ND	52.3	10-124	13.3	40	
Surrogate: Tetrachloro-meta-xylene	16.2		*	34.9		46.4	10-121			
Surrogate: Decachlorobiphenyl	18.3		*	34.9		52.4	10-127			

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:

& Andy Johnson



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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512272

Reported: 12/27/05 15:53

Percent Solids - Quality Control TestAmerica - Buffalo Grove, IL

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5120410 - General Prep							·			
Blank (5120410-BLK1)				Prepared	& Analyze	ed: 12/20/	05			
% Solids	ND	0.200	%							
Blank (5120410-BLK2)				Prepared	& Analyz	ed: 12/20/	05			
% Solids	ND	0.200	%		·					
Duplicate (5120410-DUP1)	Sou	ırce: B51225	6-02	Prepared	& Analyze	ed: 12/20/	05			
% Solids	77.8	0.200	%		78.3			0.641	20	
Duplicate (5120410-DUP2)	Sou	ırce: B51225	6-03	Prepared	& Analyze	ed: 12/20/	05			
% Solids	78.4	0.200	%		78.4			0.00	20	

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & / Approved by:

Andy Johnson, Project Manager

Page 6 of 7



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512272 Reported: 12/27/05 15:53

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

L This quality control measurement is below the laboratory established limit.

H This quality control measurement is above the laboratory established limit.

^ The laboratory is not NELAP accredited for this analyte by the indicated matrix and method.

^^ The State of Illinois Accrediting Authority does not offer NELAP accreditation for this analyte by the indicated matrix and method.

Note: All analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

TestAmerica--Buffalo Grove, IL Wisconsin DNR Certification Lab ID: 999917160

TestAmerica--Buffalo Grove, IL NELAP Primary Accreditation: Illinois #100261

TestAmerica--Buffalo Grove, IL NELAP Secondary Accreditation: New Jersey #IL001

TestAmerica--Nashville, TN NELAP Secondary Accreditation: Illinois #200010

TestAmerica--Dayton, OH NELAP Secondary Accreditation: Illinois #200008

TestAmerica--Watertown, WI NELAP Primary Accreditation: Illinois #100453

TestAmerica--Watertown, WI Wisconsin DNR Certification Lab ID: 128053530



TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Andy Johnson, Project Manager

Page 7 of 7

Test/merica ANAUTHCA TESTING CORPORATION

CHAIN OF CUSTODY REPORT

1380 Busch Parkwe,
Buffalo Grove, Illinois 60089-4505
(847) 808-7766
FAX (847) 808-7772

Client: EUM	Bill To: Same	TAT: STD. 4 DAY 3 DAY 2 DAY (1 DAY) <24 HRS.
Address: 1800 Cen'1/on Blvd.	Address:	B. YES - TAT is critical □ NO - TAT is not critical □ NO - TAT is not critical
Cincinnell ON 45420	Terms: Net 30 days	
Report to: Jackie Down Phone # (513) \$27-950 E-mail: Idean Deyn. can Fax #: ()	State & Phone # () Program: Fax #: ()	Deliverable Package: Delivery Method: □ STD □ Other TAG Client□ Shipped□ Courier□
	# of Bottles 3/2/28/39 Preservative Used 5/25/28/39	SAMPLE ONTROL
Sampler: Kan Com Sampler: Kan Com Sampler: Kan Com	(C) (2 mm/20/20/20/20/20/20/20/20/20/20/20/20/20/	TYPE / (8) (8) IABORATORY ID NUMBER
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2 CSS-F-2-29 HD; HD/65 1145	× - 1	(0)
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B PID:		
PID:		
PID:		Later 1.
Kenneth Jun 1995 RECEIVED)	COLD TAKES CRELITOUNGHED	HARE SOLVENION SIGNED TIMESTYD
	DATE RÉLINQUISHED TIME	DATE RÉCEIVED DATE TIME
COMMENTS:		
		PAGE OF

22 December 2005 Lab ID: B512287

Jackie Doan EQM 1800 Carillon Blvd. Cincinnati, OH 45240

RE: OMC - Waukegan

Enclosed are the results of analyses for samples received by the laboratory on 12/21/05. The sample results relate only to the tested analytes of interest and to the sample as received by the laboratory. At the time of analysis, the laboratory was in compliance with current NELAP standards and held accreditation for all analyses performed unless noted by a qualifier. The laboratory's Illinois NELAP accreditation number is 100261.

This report can not be reproduced, except in full, without written approval from the laboratory. If you have any questions concerning this report, please feel free to contact Andy Johnson.

Sincerely,

TestAmerica Analytical Testing Corporation

Deborah Lowe

What I I'me

Laboratory Director

James Knapp

Quality Assurance Manager



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512287 Reported: 12/22/05 16:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EMS-BP-0-33	B512287-01	Soil	12/21/05 10:30	12/21/05 16:35
EMS-P-0-34	B512287-02	Soil	12/21/05 13:30	12/21/05 16:35
CSS-EW-7-35	B512287-03	Soil	12/21/05 13:40	12/21/05 16:35
CSS-F-8-36	B512287-04	Soil	12/21/05 13:45	12/21/05 16:35
CSS-SW-7-37	B512287-05	Soil	12/21/05 13:45	12/21/05 16:35

Sample Receipt Notes

Please note that the chain of custody (COC) included with this report is considered part of the report. The data user should review any comments or notes made on the COC. Any receipt issues found by the laboratory that are not noted on the COC will be stated below.

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:

Margaret Kniest For Andy Johnson, Project Manager

arguet Knied



(847) 808-7766 FAX (847) 808-7772

EOM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B512287 Reported: 12/22/05 16:04

Polychlorinated Biphenyls by EPA Method 8082 TestAmerica - Buffalo Grove, IL

Analyte	Re Result	porting Limit	Units	Dilution	Batch	Pтерагеd	Analyz e d	Method	Note
EMS-BP-0-33 (B512287-01) Soil	Sampled: 12/21/05 10:30	Recei	ved: 12/21	/05 16:35	· · · · · ·		·		
PCB-1016	ND	140	ug/kg dry	50	5120427	12/21/05	12/22/05	EPA 8082	
PCB-1221	ND	140	ıı .	u	"	"	и	"	
PCB-1232	ND	140	н	ч	u	*1	"		
PCB-1242	ND	140	IF	11	**	"	**	н	
PCB-1248	1860	700		250	**		12/22/05	u	
PCB-1254	ND	140	"	50	"	н	12/22/05	н	
PCB-1260	ND	140	"	"	,,	11	н	11	
Surrogate: Tetrachloro-meta-xylene	?	15.0 %	10-1	21	"	"	"	,,	
Surrogate: Decachlorobiphenyl		14.9 %	10-1	27	"	"	"	"	
EMS-P-0-34 (B512287-02) Soil S	Sampled: 12/21/05 13:30 ND	Receive		5 16:35	5120427	12/21/05	12/21/05	EPA 8082	<u>-</u>
PCB-1221	ND ND	138	" " " " " " " " " " " " " " " " " " "	30	3120427	12/21/03	12/21/03	EFA 6062	
PCB-1232	ND	138	н		**	и	,,	n	
PCB-1242	ND	138	**	19	**	11	12/22/05	**	
PCB-1248	_	38000	11	50000	u	"	12/21/05	п	
CB-1254	ND	138	"	50	"	"	"	n	
. CB-1260	ND	138	H	н	u		ч		
Surrogate: Tetrachloro-meta-xylene	· · · · · · · · · · · · · · · · · · ·	64.7 %	10-1	21	"			"	
Surrogate: Decachlorobiphenyl		54.0 %	10-1		"	"	"	"	
CSS-EW-7-35 (B512287-03) Soil	Sampled: 12/21/05 13:40	Recei							
PCB-1016	ND	139	ug/kg dry	50	5120427	12/21/05	12/21/05	EPA 8082	
PCB-1221	ND	139				11	II	11	
PCB-1232	ND	139	**	11		"			
PCB-1242	ND	139	"	"		4	"		
PCB-1248	960	279		100	"	11	12/22/05		
PCB-1254	ND	139		50			12/21/05		
PCB-1260	ND	139							
Surrogate: Tetrachloro-meta-xylene	: ,	58.3 %	10-1	21	**	"	"	"	
Surrogate: Decachlorobiphenyl		52.1 %	10-1	27	"	"	n	n	

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512287 **Reported:** 12/22/05 16:04

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
<u> </u>	Sampled: 12/21/05 13:45						, 200		
PCB-1016	ND	137	ug/kg dry	50	5120427	12/21/05	12/21/05	EPA 8082	
PCB-1221	ND	137	"	"		0	"	"	
PCB-1232	ND	137	n	*1		п	**		
PCB-1242	ND	137	п	11		п	"	н	
PCB-1248	538	137	н	**			11	11	
PCB-1254	ND	137	п	10	н	n	10	н	
PCB-1260	ND	137	n	u	н	n	п		
Surrogate: Tetrachloro-meta-xyler		68.1 %	10-1	21	<i>n</i>	,,	,,	"	
Surrogate: Decachlorobiphenyl		71.4%	10-1	27	"	11	"	"	
	····				6100427	12/21/05	10/01/05	FD+ 0002	
PCB-1016	ND	163	ug/kg dry	50	5120427	12/21/05	12/21/05	EPA 8082	
PCB-1016 PCB-1221	ND ND	163 163	ug/kg dry	50	н	н	**	n	
PCB-1016 PCB-1221 PCB-1232	ND ND ND	163 163 163	ug/kg dry "	50	H	11	**	"	
PCB-1016 PCB-1221 PCB-1232 PCB-1242	ND ND ND ND	163 163 163 163	ug/kg dry " "	50	n n	n n	11 11	"	
PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248	ND ND ND ND ND 321	163 163 163 163 163	ug/kg dry " " "	50	n u u	11 11 11	11 91 93 61	11 11	
CSS-SW-7-37 (B512287-05) Soil PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254	ND ND ND ND 321 ND	163 163 163 163 163 163	ug/kg dry " " " "	50	n u u	" " " " " " " " " " " " " " " " " " " "	11 11 11	" " " " " " " " " " " " " " " " " " " "	
PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248	ND ND ND ND ND 321	163 163 163 163 163	ug/kg dry " " "	50	n u u	11 11 11	11 91 93 61	11 11	
PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254	ND ND ND ND 321 ND ND	163 163 163 163 163 163	ug/kg dry " " " "	50	n u u	" " " " " " " " " " " " " " " " " " " "	11 11 11	" " " " " " " " " " " " " " " " " " " "	

TestAmerica - Buffalo Grove, IL

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Reviewed & Margaret Knied Approved by:



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512287

Reported: 12/22/05 16:04

Percent Solids

TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EMS-BP-0-33 (B512287-01) Soil	Sampled: 12/21/05 10:30) Receiv	ed: 12/2	1/05 16:35					
% Solids	89.3	0.200	%	1	5120431	12/21/05	12/22/05	EPA 5035 7.5	
EMS-P-0-34 (B512287-02) Soil S	Sampled: 12/21/05 13:30	Received	1: 12/21/	05 16:35					
% Solids	90.5	0.200	%	1	5120431	12/21/05	12/22/05	EPA 5035 7.5	
CSS-EW-7-35 (B512287-03) Soil	Sampled: 12/21/05 13:40	D Receiv	ed: 12/2	1/05 16:35					_
% Solids	79.8	0.200	%	1	5120431	12/21/05	12/22/05	EPA 5035 7.5	
CSS-F-8-36 (B512287-04) Soil S	ampled: 12/21/05 13:45	Received	: 12/21/0	15 16:35					
% Solids	78.8	0.200	%	1	5120431	12/21/05	12/22/05	EPA 5035 7.5	
CSS-SW-7-37 (B512287-05) Soil	Sampled: 12/21/05 13:45	5 Receive	ed: 12/21	1/05 16:35					
% Solids	76.7	0.200	%	1	5120431	12/21/05	12/22/05	EPA 5035 7.5	

TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Margaret Kniest For Andy Johnson, Project Manager

Uaigaret Knied

Page 4 of 7



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan Lab ID: B512287

Reported: 12/22/05 16:04

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5120427 - EPA 3550B								····		
Blank (5120427-BLK1)				Prepared:	12/21/05	Analyzed	: 12/22/05			
PCB-1016	ND	25.0	ug/kg wet							
PCB-1221	ND	25.0	11							
PCB-1232	ND	25.0	и							
PCB-1242	ND	25.0	10							
PCB-1248	ND	25.0	11							
PCB-1254	ND	25.0	11							
PCB-1260	ND	25.0	**	•						
Surrogate: Tetrachloro-meta-xylene	29.6		"	34.2		86.5	10-121	·		
Surrogate: Decachlorobiphenyl	38.9		"	34.2		114	10-127			
LCS (5120427-BS1)				Prepared:	12/21/05	Analyzed	: 12/22/05			
PCB-1016	69.7	25.0	ug/kg wet	85.2		81.8	14.4-123			
PCB-1260	78.8	25.0	"	85.2		92.5	12.2-132			
urrogate: Tetrachloro-meta-xylene	21.1	~	"	34.1		61.9	10-121			
surrogate: Decachlorobiphenyl	29.3		"	34.1		85.9	10-127			
Matrix Spike (5120427-MS1)	So	urce: B5122	57-03	Prepared:	12/21/05	Analyzed	: 12/22/05			
PCB-1016	76.9	30.5	ug/kg dry	105	ND	73.2	10-112			
PCB-1260	80.3	30.5	н	105	ND	76.5	10-124			
Surrogate: Tetrachloro-meta-xylene	25.2		*	42.0	· · · · · · · · · · · · · · · · · · ·	60.0	10-121			
Surrogate: Decachlorobiphenyl	31.2		*	42.0		74.3	10-127			
Matrix Spike Dup (5120427-MSD1)	So	urce: B5122	57-03	Prepared:	12/21/05	Analyzed	: 12/22/05			
PCB-1016	73.9	30.5	ug/kg dry	99.7	ND	74.1	10-112	3.98	40	
PCB-1260	74.1	30.5	"	99.7	ND	74.3	10-124	8.03	40	
Surrogate: Tetrachloro-meta-xylene	19.9		"	39,9		49.9	10-121			
Surrogate: Decachlorobiphenyl	25.8		"	39.9		64.7	10-127			

TestAmerica - Buffalo Grove, IL Margaret Xniest The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Margaret Kniest For Andy Johnson, Project Manager



(847) 808-7766 FAX (847) 808-7772

EOM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan Lab ID: B512287

Reported: 12/22/05 16:04

Percent Solids - Quality Control TestAmerica - Buffalo Grove, IL

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 5120431 - General Prep										
Blank (5120431-BLK1)				Prepared:	12/21/05	Analyzed	: 12/22/05			
% Solids	ND	0.200	%							
Duplicate (5120431-DUP1)	Sou	rce: B51227	6-01	Prepared:	12/21/05	Analyzed	: 12/22/05			
% Solids	85.1	0.200	%		85.7			0.703	20	

TestAmerica - Buffalo Grove, IL Margaret Kniest

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Margaret Kniest For Andy Johnson, Project Manager



(847) 808-7766 FAX (847) 808-7772

Project: OMC - Waukegan

1800 Carillon Blvd.Project Number: 10315Cincinnati, OH 45240Project Manager: Jackie Doan

Lab ID: B512287 Reported: 12/22/05 16:04

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

∟QM

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

L This quality control measurement is below the laboratory established limit.

H This quality control measurement is above the laboratory established limit.

^ The laboratory is not NELAP accredited for this analyte by the indicated matrix and method.

^^ The State of Illinois Accrediting Authority does not offer NELAP accreditation for this analyte by the indicated matrix and method.

Note: All analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

TestAmerica--Buffalo Grove, IL Wisconsin DNR Certification Lab ID: 999917160

TestAmerica--Buffalo Grove, IL NELAP Primary Accreditation: Illinois #100261

TestAmerica--Buffalo Grove, IL NELAP Secondary Accreditation: New Jersey #IL001

TestAmerica--Nashville, TN NELAP Secondary Accreditation: Illinois #200010

TestAmerica--Dayton, OH NELAP Secondary Accreditation: Illinois #200008
TestAmerica--Watertown, WI NELAP Primary Accreditation: Illinois #100453

l'estAmerica--Watertown, WI Wisconsin DNR Certification Lab ID: 128053530



TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Margaret Kniest For Andy Johnson, Project Manager

Margaret Knied

Page 7 of 7

Test America Medical Termine CORPORATION

CHAIN OF CUSTODY REPORT

1380 Busch Park: Buffalo Grove, Illinois 60089-4505 (847) 808-7766 FAX (847) 808-7772

Client: Eam	<u> </u>	Bill To: Sames	120			TAT: STD. 4 DAY	3 DAY	2 DAY (DAY) <24 HRS.	HS.
Address: 1800 Carillon Blue.	4	Address:				图 YES - TAT is critical	cal	DATE RESULTS NEEDEL	
07					Terms: Net 30 days	Received at labo	ratog: P	Way Day	
Phone #: (5 ⁻¹³ , Fax #: () 825-7500)	State & Program:	P	Рһопө #: (Fax #: ((Deliverable Package: □ STD □ Other	ge: Delivery Methedi er TAM Client	Shipped	Courier
Vame: OMC Plant"2			# of Bottles	225	120	////	SAMPLE CONTROL	THIS SECTION FOR	Æ
Project #/PO#:	~ <i>&</i> /		rreservanve Used	400.	800	/ /s/			
Sampler: Ken Brown FIELD ID LOCATION	SOTEO TIME ESTE DO DATE DATE DO DATE D	SHOWNS HOWNS	THON HOSEL SONH					LABORATORY ID NUMBER	-
EMS-39-0-33	2	7:		×	1-00-1 1-00-1	TA T in Freeze	3	17 18cc15	7
EMS-P-0-34 PID:	०६६१ रिश्निय	50,7	1 1	X	**************************************	land vessells on) 水		E
3 CSS - EW-7-35 12/	12/02-1340		1	X	χ <u>ς'</u> -1	787			É
CSS · F - 8-36	142/00/1345		7	Х	1- Day	737			=
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DATE	RECEIVED		DATE RELINQUISHE TIME	изнер		DATE GECEIVI TIME		DATE	
COMMENTS:									
							PAGE	OF	

(847) 808-7766 FAX (847) 808-7772

30 December 2005 Lab ID: B512295

Jackie Doan EQM 1800 Carillon Blvd. Cincinnati, OH 45240

RE: OMC - Waukegan

Enclosed are the results of analyses for samples received by the laboratory on 12/22/05. The sample results relate only to the tested analytes of interest and to the sample as received by the laboratory. At the time of analysis, the laboratory was in compliance with current NELAP standards and held accreditation for all analyses performed unless noted by a qualifier. The laboratory's Illinois NELAP accreditation number is 100261.

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Sincerely,

TestAmerica Analytical Testing Corporation

Deborah Lowe

Laboratory Director

ulnat 1 three

James Knapp

Quality Assurance Manager



(847) 808-7766 FAX (847) 808-7772

EQM Project: OMC - Waukegan

1800 Carillon Blvd.Project Number:10315Lab ID:B512295Cincinnati, OH 45240Project Manager:Jackie DoanReported:12/30/05 14:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CSS-EW-3-38	B512295-01	Soil	12/22/05 10:00	12/22/05 12:30
CSS-EW-3-39	B512295-02	Soil	12/22/05 10:00	12/22/05 12:30
EMS-GR-0-40	B512295-03	Soil	12/22/05 10:30	12/22/05 12:30
EMS-ODR-0-41	B512295-04	Soil	12/22/05 10:45	12/22/05 12:30
EMS-IHP-0-42	B512295-05	Soil	12/22/05 11:00	12/22/05 12:30

Sample Receipt Notes

Please note that the chain of custody (COC) included with this report is considered part of the report. The data user should review any comments or notes made on the COC. Any receipt issues found by the laboratory that are not noted on the COC will be stated below.

TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Andy Johnson, Project Manager

Page 1 of 7



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EOM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B512295 **Reported:** 12/30/05 14:56

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - Buffalo Grove, IL

				aio Gro					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-EW-3-38 (B512295-01) Soil	Sampled: 12/22/05 1	0:00 Recei	ived: 12/22	/05 12:30					QC
PCB-1016	ND	142	ug/kg dry	50	5120459	12/22/05	12/22/05	EPA 8082	
PCB-1221	ND	142	**	n	U	11	**	II.	
PCB-1232	ND	142	**	et	"	u	n	**	
PCB-1242	ND	142			**	*1	н	11	
PCB-1248	667000	142000	**	50000	**	"	12/30/05	n	
PCB-1254	ND	142	u	50	U	11	12/22/05	11	
PCB-1260	ND	142	н	18	**	**	"	•	
Surrogate: Tetrachloro-meta-xylene		55.2 %	10-1	121	"	"	"	н	
Surrogate: Decachlorobiphenyl		96.9 %	10-1	127	"	"	,,	"	
CSS-EW-3-39 (B512295-02) Soil	Sampled: 12/22/05 1	0:00 Recei	ived: 12/22	/05 12:30					QC
PCB-1016	ND	141	ug/kg dry	50	5120459	12/22/05	12/22/05	EPA 8082	
PCB-1221	ND	141	"	11	0	n	н	11	
PCB-1232	ND	141	,,	10	11	**	ıı	н	
PCB-1242	ND	141	**	"	**	u	11	н	
PCB-1248	1140000	565000	U	200000	••		12/30/05		
CB-1254	ND	141	н	50	14	#	12/22/05	**	
сCB-1260	ND	141	н	**	n	n n	**	"	
Surrogate: Tetrachloro-meta-xylene		46.6 %	10-1	121	"	,,	,,	"	
Surrogate: Decachlorobiphenyl		93.2 %	10-1		"	,	n	n	
EMS-GR-0-40 (B512295-03) Soil	Sampled: 12/22/05 1	0:30 Rece	ived: 12/22	2/05 12:30					QC
PCB-1016	ND	132	ug/kg dry	50	5120459	12/22/05	12/22/05	EPA 8082	
PCB-1221	ND	132	**	**	11	n	"	11	
PCB-1232	ND	132	#1	n	**	u	n	II .	
PCB-1242	ND	132	19	11		**	H	u	
PCB-1248	67100	26400	u	10000	**	**	12/27/05	**	
PCB-1254	ND	132	"	50	10	**	12/22/05	и	
PCB-1260	ND	132	**	**	n	0	"	**	
Surrogate: Tetrachloro-meta-xylene		72.0 %	10-1	121	,,	"	*	"	
Surrogate: Decachlorobiphenyl		75.8 %	10-1		"	"	*	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & /

Andy Johnson, Project Manager

Page 2 of 7



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512295

Reported: 12/30/05 14:56

Polychlorinated Biphenyls by EPA Method 8082 TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EMS-ODR-0-41 (B512295-04) Soil	Sampled: 12/22/0	5 10:45 Rec	eived: 12/	22/05 12:	30	_			QC
PCB-1016	ND	142	ug/kg dry	50	5120459	12/22/05	12/22/05	EPA 8082	
PCB-1221	ND	142	19	п	11	**	"		
PCB-1232	ND	142	11	н	19	11	"	"	
PCB-1242	ND	142	u		H	Ü	н	"	
PCB-1248	87700	28500	*1	10000	n	н	12/27/05	н	
PCB-1254	ND	142	11	50	"	ч	12/22/05	u .	
PCB-1260	ND	142	11	11	**	**	"	u	
Surrogate: Tetrachloro-meta-xylene		69.1 %	10-1	121	,,	"	"	"	
Surrogate: Decachlorobiphenyl		71.9 %	10-1	127	"	n	"	"	
EMS-IHP-0-42 (B512295-05) Soil	Sampled: 12/22/05	11:00 Rece	eived: 12/2	2/05 12:30	0				QC
PCB-1016	ND	116	ug/kg dry	50	5120459	12/22/05	12/22/05	EPA 8082	
PCB-1221	ND	116	*	•	"	*	**	*	
PCB-1232	ND	116		*11	"	"	•	н	
PCB-1242	ND	116	It	n	11	**	н		
PCB-1248	67900	23100		10000	**	n	12/27/05	н	
CB-1254	ND	116	*	50	•	**	12/22/05	**	
CB-1260	ND	116	"	"	н	**	**	**	
Surrogate: Tetrachloro-meta-xylene		74.9 %	10-1	21	,,	"	"	"	
Surrogate: Decachlorobiphenyl		73.0 %	10-1	27	"	*	*	*	

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & / Approved by:

Andy Johnson, Project Manager

Page 3 of 7



(847) 808-7766 FAX (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315 Project Manager: Jackie Doan **Lab ID:** B512295 **Reported:** 12/30/05 14:56

Percent Solids

TestAmerica - Buffalo Grove, IL

Analyte	Re Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
CSS-EW-3-38 (B512295-01) Soil	Sampled: 12/22/05 10:00	Receiv	ed: 12/2	2/05 12:30					
% Solids	88.0	0.200	%	1	5120445	12/22/05	12/27/05	EPA 5035 7.5	
CSS-EW-3-39 (B512295-02) Soil	Sampled: 12/22/05 10:00	Receiv	ved: 12/2	2/05 12:30					
% Solids	88.5	0.200	%	1	5120445	12/22/05	12/27/05	EPA 5035 7.5	
EMS-GR-0-40 (B512295-03) Soil	Sampled: 12/22/05 10:30	Recei	ved: 12/2	22/05 12:30					
% Solids	94.7	0.200	%	1	5120445	12/22/05	12/27/05	EPA 5035 7.5	
EMS-ODR-0-41 (B512295-04) Soi	il Sampled: 12/22/05 10:4	15 Rec	eived: 12	2/22/05 12:3	0				
% Solids	87.8	0.200	%	1	5120445	12/22/05	12/27/05	EPA 5035 7.5	
EMS-IHP-0-42 (B512295-05) Soil	Sampled: 12/22/05 11:00	Recei	ived: 12/	22/05 12:30)				
% Solids	91.8	0.200	%	l	5120445	12/22/05	12/27/05	EPA 5035 7.5	

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512295 **Reported:** 12/30/05 14:56

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5120459 - EPA 3550B										
Blank (5120459-BLK1)				Prepared	& Analyz	ed: 12/22/	05			
PCB-1016	ND	25.0	ug/kg wet							
PCB-1221	ND	25.0	н							
PCB-1232	ND	25.0	,,							
PCB-1242	ND	25.0	19							
PCB-1248	ND	25.0	н							
PCB-1254	ND	25.0	н							
PCB-1260	ND	25.0	*1							
Surrogate: Tetrachloro-meta-xylene	28.8		"	34.0		84.7	10-121			
Surrogate: Decachlorobiphenyl	27.3		"	34.0		<i>80.3</i>	10-127			
LCS (5120459-BS1)				Prepared	& Analyz	ed: 12/22/	05			
PCB-1016	82.8	21.8	ug/kg wet	82.6	<u>-</u> -	100	14.4-123			
PCB-1260	73.2	21.8	11	82.6		88.6	12.2-132			
rrogate: Tetrachloro-meta-xylene	26.5		"	33.0		80.3	10-121			
surrogate: Decachlorobiphenyl	<i>25</i> , <i>9</i>		,,	33.0		<i>78.5</i>	10-127			
Matrix Spike (5120459-MS1)	So	urce: B5122	95-04	Prepared:	12/22/05	Analyze	d: 12/27/05			
PCB-1016	133000	56900	ug/kg dry	96.7	ND	NR	10-112			Н
PCB-1260	19700	5690	H	96.7	ND	NR	10-124			Н
Surrogate: Tetrachloro-meta-xylene	108		*	38.7		279	10-121			Н
Surrogate: Decachlorobiphenyl	159		"	38.7		411	10-127			Н
Matrix Spike Dup (5120459-MSD1)	So	urce: B5122	95-04	Prepared:	12/22/05	Analyzed	i: 12/27/05			
PCB-1016	79700	28500	ug/kg dry	92.5	ND	NR	10-112	50.1	40	НН
PCB-1260	11800	2850	"	92.5	ND	NR	10-124	50.2	40	нн
Surrogate: Tetrachloro-meta-xylene	52.2		n	37.0		141	10-121			Н
Surrogate: Decachlorobiphenyl	63.6		m	37.0		172	10-127			Н

TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Andy Johnson



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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B512295

Reported: 12/30/05 14:56

Percent Solids - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5120445 - General Prep										
Blank (5120445-BLK1)	-			Prepared:	12/22/05	Analyzed:	12/27/05			
% Solids	ND	0.200	%							
Blank (5120445-BLK2)				Prepared:	12/22/05	Analyzed	12/27/05			
% Solids	ND	0.200	%							
Duplicate (5120445-DUP1)	So	urce: B51229	4-01	Prepared:	12/22/05	Analyzed	: 12/27/05			
% Solids	82.0	0.200	%		80.5			1.85	20	
Duplicate (5120445-DUP2)	So	urce: B51229	4-02	Prepared:	12/22/05	Analyzed	12/27/05			
% Solids	79.7	0.200	%		80.0	· · · · · · · · · · · · · · · · · · ·		0.376	20	

TestAmerica - Buffalo Grove, IL

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Andy Johnson, Project Manager

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(847) 808-7766 FAX (847) 808-7772

∃QM Project: OMC - Waukegan

1800 Carillon Blvd.Project Number: 10315Lab ID: B512295Cincinnati, OH 45240Project Manager: Jackie DoanReported: 12/30/05 14:56

Notes and Definitions

QC The result for one or more quality control measurements associated with this sample did not meet the laboratory and/or source

method acceptance criteria.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

L This quality control measurement is below the laboratory established limit.

H This quality control measurement is above the laboratory established limit.

The laboratory is not NELAP accredited for this analyte by the indicated matrix and method.

^^ The State of Illinois Accrediting Authority does not offer NELAP accreditation for this analyte by the indicated matrix and method.

Note: All analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

TestAmerica--Buffalo Grove, IL Wisconsin DNR Certification Lab ID: 999917160

TestAmerica--Buffalo Grove, IL NELAP Primary Accreditation: Illinois #100261

TestAmerica--Buffalo Grove, IL NELAP Secondary Accreditation: New Jersey #IL001

TestAmerica--Nashville, TN NELAP Secondary Accreditation: Illinois #200010

TestAmerica--Dayton, OH NELAP Secondary Accreditation: Illinois #200008

TestAmerica--Watertown, WI NELAP Primary Accreditation: Illinois #100453

TestAmerica--Watertown, WI Wisconsin DNR Certification Lab ID: 128053530



TestAmerica - Buffalo Grove, IL

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Andy Johnson, Project Manager

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Test/merica ANATORIA TESTING CONFORMINON

CHAIN OF CUSTODY REPORT

1380 Busch Parkw Buffalo Grove, Illinois 600._-4505 (847) 808-7766 FAX (847) 808-7772

Client: Ets W	Bill To: Same	TAT: STD. 4 DAY 3 DAY 2 DAY (1 DAY) <24 HRS.
10	.;;	ES - TAT is critical O - TAT is not critical
ncinnoti Oll 45420		Received at laboratory:
Report to: Jack Down Phone # (5/2) 1:25-7530	Phone #: () Program: Fax #: ()	Deliverable Package: Delivery Method: □STD □ Other TA□ Cleent□ Shipped□ Courier□
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RELINQUISHED DATE RECEIVED TIME	DATE RIKLINQUISHED TIME	DATE MECEIVED DATE TIME
COMMENTS:		
		PAGE OF

01 February 2006

1380 Busch Parkway Buffalo Grove, Illinois 60089

Lab ID: B601239

Phone: (847) 808-7766

Fax: (847) 808-7772

Jackie Doan EQM 1800 Carillon Blvd. Cincinnati, OH 45240

RE: OMC - Waukegan

Enclosed are the results of analyses for samples received by the laboratory on 01/19/06. The sample results relate only to the tested analytes of interest and to the sample as received by the laboratory. At the time of analysis, the laboratory was in compliance with current NELAP standards and held accreditation for all analyses performed unless noted by a qualifier. The laboratory's Illinois NELAP accreditation number is 100261.

This report can not be reproduced, except in full, without written approval from the laboratory. If you have any questions concerning this report, please feel free to contact Andy Johnson.

Sincerely,

TestAmerica Analytical Testing Corporation

Deborah Lowe

Laboratory Director

unat 1 me

James Knapp

Quality Assurance Manager



Phone: (847) 808-7766 Fax: (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601239 **Reported:** 02/01/06 12:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory 1D	Matrix	Date Sampled	Date Received
LSS-0-0-45	B601239-01	Soil	01/18/06 15:00	01/19/06 08:30

Sample Receipt Notes

Please note that the chain of custody (COC) included with this report is considered part of the report. The data user should review any comments or notes made on the COC. Any receipt issues found by the laboratory that are not noted on the COC will be stated below.

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Reviewed & Approved by: Margaret Kniest



Phone: (847) 808-7766 Fax: (847) 808-7772

ĒОМ

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601239

Reported: 02/01/06 12:10

Toxicity Characteristic Leaching Procedure (TCLP) by EPA Method 1311 TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LSS-0-0-45 (B601239-01) Soil S	ampled: 01/18/06 15:00	Received	: 01/19/0	6 08:30					
Date of Inorganics Rotation	01/19/06				6010313			EPA 1311	
Date of Semivolatile Organics Rotation	01/19/06		"	"	11	н	"	н	
Date of Volatile Organics ZHE Rotation	01/19/06		••	н	**	10	11	11	

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EQM

1800 Carillon Blvd. Cincinnati, OH 45240 Project: OMC - Waukegan

Project Number: 10315 Project Manager: Jackie Doan Lab ID: B601239

Reported: 02/01/06 12:10

General Chemistry

TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LSS-0-0-45 (B601239-01) Soil	Sampled: 01/18/06 15:00	Receive	d: 01/19/06	08:30				<u>-</u>	
Flashpoint	>220 °F		°F	1	6010342	01/20/06	01/20/06	ASTM D92-85	
Free Liquid	No sample flowed.		N/A	**	6010343	01/20/06	01/20/06	9095A	
рН	8.63		pH Units	•1	6010318	01/19/06	01/19/06	EPA 9045C	G26
Phenol	ND	0.676	mg/kg dry	11	6010332	01/20/06	01/23/06	EPA 9065	
Reactive Cyanide	ND	0.139	**	н	6010337	01/20/06	01/23/06	EPA 9014 Ch 7	G33
Reactive Sulfide	ND	6.97	**	18	6010338	01/20/06	01/20/06	EPA 9034 Ch 7	G33

TestAmerica - Buffalo Grove, IL Margaret Kniest

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Reviewed & Approved by:

Margaret Kniest For Andy Johnson, Project Manager



Phone: (847) 808-7766 Fax: (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

TCLP Metals by EPA 1311/6000/7000 Series Methods

TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LSS-0-0-45 (B601239-01) Soil	Sampled: 01/18/06 15:00	Received	01/19/0	6 08:30			_		
Mercury	ND	0.000200	mg/l	1	6010400	01/26/06	01/26/06	EPA 7470A	
Arsenic	ND	0.0500	**	*1	6010326	01/20/06	01/24/06	EPA 6010B	
Barium	0.904	0.100	ŧ	*1	"	*	"	**	QC
Cadmium	ND	0.00500	o o	11	н	**		Ħ	
Chromium	ND	0.100	н	п	11	**	**	H	
Selenium	ND	0.0500	#1	"	н	**	**	IP.	
Silver	ND	0.0500	*1	u	11	n	**	•	
Lead	ND	0.00500	11	"	n	H	01/20/06	EPA 7421	

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∠QM Project: OMC - Waukegan

1800 Carillon Blvd.Project Number:10315Lab ID:B601239Cincinnati, OH 45240Project Manager:Jackie DoanReported:02/01/06 12:10

TCLP Volatile Organic Compounds by EPA Methods 1311/8260B

TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LSS-0-0-45 (B601239-01) Soil	Sampled: 01/18/06 15:00	Received	01/19/0	6 08:30					QC
Benzene	ND	0.400	mg/l	20	6010354	01/23/06	01/23/06	EPA 8260B	
Carbon tetrachloride	ND	0.400	19	н	11	D	n	н	
Chlorobenzene	ND	0.400	н	11	u	U	**	н	
Chloroform	ND	0.400	**	*	**	11	**	**	
1,2-Dichloroethane	ND	0.400	н	11	11	"	•	**	
1,1-Dichloroethylene	ND	0.400	10	n	"	н	11	19	
Methyl ethyl ketone	ND	100	н	**	u	11	ıı .	n .	
Tetrachloroethene	ND	0.400	11	Ħ	u	II .		**	
Trichloroethylene	ND	0.400	Ħ	**	16	н			
Vinyl chloride	ND	0.160		10	"		н	н	
Surrogate: Dibromofluorometha	ne	103 %	55.9	-150	"	"	"	,,	
Surrogate: 1,2-Dichloroethane-a	14	101 %	47.5	T-150	"	"	,,	N	
Surrogate: Toluene-d8		103 %	55.4	1-145	"	"	"	"	
Surrogate: 4-Bromofluorobenzen	ie	100 %	40.4	-137	"	"	n	n	

TestAmerica - Buffalo Grove, IL

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Surrogate: p-Terphenyl-d14

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

TCLP Semivolatiles by EPA Methods 1311/8270C TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
LSS-0-0-45 (B601239-01) Soil	Sampled: 01/18/06 15:00	Received	01/19/0	6 08:30			-		
o-Cresol	ND	17.6	mg/l	1	6010322	01/20/06	01/23/06	EPA 8270C	
m,p-Cresols	ND	17.6	**	"	11	11	n	н	
Cresol	ND	17.6	**	*	ıı .	H	н	n .	
1,4-Dichlorobenzene	ND	0.660	**	*	u	•	u	n	
2,4-Dinitrotoluene	ND	0.0176	**	n	н	•	н	u	
Hexachlorobenzene	ND	0.0176	u	ii .	**	**	•	u	
Hexachlorobutadiene	ND	0.0440		"	"	"	**	н	
Hexachloroethane	ND	0.264	•	**	н	ıı			
Nitrobenzene	ND	0.176	11	**	"	n		"	
Pentachlorophenol	ND	8.80	11	н	*	u u	•	•	
Pyridine	ND	0.440	н	ıı	**	•		н	
2,4,5-Trichlorophenol	ND	35.2	n	и		11	•	H	
2,4,6-Trichlorophenol	ND	0.176	n	1e	**	**	"	n	
Surrogate: 2-Fluorophenol		16.7 %	10-	110	"	"	н	"	
Surrogate: Phenol-d6		12.2 %	10-	110	"	"	"	n	
Surrogate: Nitrobenzene-d5		42.4 %	10-	116	п	"	"	n	
Surrogate: 2-Fluorobiphenyl		46.0 %	10-	119	"	п	#	n	
urrogate: 2,4,6-Tribromopheno	ol.	32.4 %	10-	114	"	*	"	n	

10-135

40.8 %

TestAmerica - Buffalo Grove, IL Margaret Kniest

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

Percent Solids

TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LSS-0-0-45 (B601239-01) Soil	Sampled: 01/18/06 15:00	Received	01/19/0	6 08:30					
% Solids	93.2	0.200	%	1	6010302	01/19/06	01/19/06	EPA 5035 7.5	

TestAmerica - Buffalo Grove, IL

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Reviewed & Margaret Kniest Approved by:



Phone: (847) 808-7766 Fax: (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601239 **Reported:** 02/01/06 12:10

General Chemistry Parameters TestAmerica Analytical - Nashville

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LSS-0-0-45 (B601239-01) Soil	Sampled: 01/18/06 15:00	Received	: 01/19/0	6 08:30					
Extractable Organic Halides	ND	50.0	mg/kg	1	6012707	01/20/06	01/22/06	SW846 9023	

TestAmerica - Buffalo Grove, IL

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& Margaret Kniest For Andy Johnson, Project Manager



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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

TCLP Chlorinated Herbicides by EPA Method 8151

TestAmerica Analytical - Nashville

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
LSS-0-0-45 (B601239-01) Soil	Sampled: 01/18/06 15:00	Received	: 01/19/0	6 08:30					
2,4-D	ND	0.100	mg/L	1	6013738	01/23/06	01/25/06	SW846 1311/8151A	
2,4,5-TP (Silvex)	ND	0.0100			н		**	н	
Surrogate: Dichloroacetic Acid		59 %	17-	136	"	"	"	"	

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EQM Project: OMC - Waukegan

1800 Carillon Blvd. Project Number: 10315 Lab ID: B601239 Cincinnati, OH 45240 Project Manager: Jackie Doan Reported: 02/01/06 12:10

TCLP Pesticides by EPA Method 1311/8081A

TestAmerica Analytical - Nashville

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
LSS-0-0-45 (B601239-01) Soil	Sampled: 01/18/06 15:0	0 Received	: 01/19/06	08:30			-		
gamma-BHC (Lindane) [2C]	ND	0.000500	mg/L	1	6013290	01/24/06	01/26/06	SW846 1311/8081A	
Chlordane [2C]	ND	0.000500	*	••	**	н		11	
Endrin [2C]	ND	0.000500	**	*1	,,			**	
Heptachlor [2C]	ND	0.000500	**	н	**	**	16	н	
Heptachlor epoxide [2C]	ND	0.000500	**	10	*	**	"	**	
Methoxychlor [2C]	ND	0.000500	*	"	19	11	**		
Toxaphene [2C]	ND	0.0100	•		**	"	0	**	
Surrogate: Tetrachloro-meta-xyi	lene [2C]	100 %	58-	117	,,	"	"	"	
Surrogate: Decachlorobiphenyl	[2C]	87 %	22-1	115	"	"	"	"	

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EOM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan Lab ID: B601239

Reported: 02/01/06 12:10

General Chemistry - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6010318 - General Prep WC										
Duplicate (6010318-DUP1)	Sou	urce: B6012	13-01	Prepared	& Analyze	ed: 01/19/0)6			
рН	6.50		pH Units		6.52			0.307	1	
Batch 6010332 - General Prep WC										
Blank (6010332-BLK1)				Prepared:	01/20/06	Analyzed	: 01/23/06			
Phenol	ND	0.630	mg/kg wet							
LCS (6010332-BS1)				Prepared:	01/20/06	Analyzed	: 01/23/06			
Phenol	10.6	0.630	mg/kg wet	10.0		106	85.5-119			
Matrix Spike (6010332-MS1)	Soi	urce: B6012	39-01	Prepared:	01/20/06	Analyzed	: 01/23/06			
Phenol	9.47	0.676	mg/kg dry	10.7	ND	88.5	45-119			
Matrix Spike Dup (6010332-MSD1)	Soi	urce: B6012	39-01	Prepared:	01/20/06	Analyzed	: 01/23/06			
Phenol	9.63	0.676	mg/kg dry	10.6	ND	90.8	45-119	1.68	34.7	
atch 6010337 - General Prep WC	_=									
Blank (6010337-BLK1)				Prepared:	01/20/06	Analyzed	: 01/23/06			
Reactive Cyanide	ND	0.130	mg/kg wet							
LCS (6010337-BS1)				Prepared:	01/20/06	Analyzed	: 01/23/06			
Reactive Cyanide	9.24	0.130	mg/kg wet	11.4		81.1	42.1-110			
Matrix Spike (6010337-MS1)	Sou	urce: B6012	39-01	Prepared:	01/20/06	Analyzed	: 01/23/06			
Reactive Cyanide	10.8	0.139	mg/kg dry	12.2	ND	88.5	30.6-110			

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Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

General Chemistry - Quality Control TestAmerica - Buffalo Grove, IL

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6010337 - General Prep WC										
Matrix Spike Dup (6010337-MSD1)	Sou	rce: B6012	39-01	Prepared	01/20/06	Analyzed	1: 01/23/06			
Reactive Cyanide	10.6	0.139	mg/kg dry	12.0	ND	88.3	30.6-110	1.87	40	
Batch 6010338 - General Prep WC										
Blank (6010338-BLK1)				Prepared	& Analyze	d: 01/20/	06			
Reactive Sulfide	ND	6.50	mg/kg wet							
LCS (6010338-BS1)				Prepared	& Analyze	d: 01/20/	06			
Reactive Sulfide	25.0	6.50	mg/kg wet	24.0		104	10-139			
Matrix Spike (6010338-MS1)	Sou	rce: B6012	39-01	Prepared	& Analyze	d: 01/20/	06			
Reactive Sulfide	21.4	6.97	mg/kg dry	25.6	ND	83.6	10-110			
Matrix Spike Dup (6010338-MSD1)	Sou	rce: B6012	39-01	Prepared	& Analyze	d: 01/20/	06			
Reactive Sulfide	23.7	6.97	mg/kg dry	25.2	ND	94.0	10-110	10.2	33.5	
3atch 6010342 - General Prep WC										
Duplicate (6010342-DUP1)	Sou	rce: B6012	54-01	Prepared	& Analyze	ed: 01/20/	06			
Flashpoint	>220 °F		°F		0.00				20	

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

TCLP Metals by EPA 1311/6000/7000 Series Methods - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6010326 - EPA 3010A TCLP/	SPLP									
Blank (6010326-BLK1)	=======================================			Prepared:	01/20/06	Analyzeo	1: 01/24/06			
Arsenic	ND	0.0500	mg/l					·		
Baríum	ND	0.100	11							
Cadmium	ND	0.00500	•							
Chromium	ND	0.100	**							
.ead	ND	0.00500								
Selenium	ND	0.0500								
ilver	ND	0.0500	*							
.CS (6010326-BS1)				Prepared:	01/20/06	Analyzed	l: 01/24/06			
Arsenic	0.208	0.0500	mg/l	0.200		104	85.8-110			
Barium	0.474	0.100	11	0.500		94.8	90-111			
Cadmium	0.203	0.00500	D	0.200		102	90-115			
hromium	0.194	0.100	n	0.200		97.0	83.6-110			
ead	0.0239	0.00500	U	0.0300		79.7	58.1-128			
elenium	0.227	0.0500	н	0.200		114	87.3-117			
ilver	0.101	0.0500	"	0.100		101	65.4-125			
Matrix Spike (6010326-MS1)	So	urce: B60123	9-01	Prepared:	01/20/06	Analyzed	l: 01/24/06			
Arsenic	0.217	0.0500	mg/l	0.200	0.00910	104	81.5-118			
arium	1.33	0.100	**	0.500	0.904	85.2	90-112			L
admium	0.200	0.00500	**	0.200	ND	100	90-114			
'hromium	0.193	0.100	11	0.200	ND	96.5	81.5-110			
ead	0.0268	0.00500	н	0.0300	0.00442	74.6	27.5-149			
elenium	0.231	0.0500	**	0.200	0.0110	110	86.8-119			
ilver	0.104	0.0500	11	0.100	ND	104	10-150			
Matrix Spike Dup (6010326-MSD1)	So	urce: B60123	9-01	Prepared:	01/20/06	Analyzed	1: 01/24/06			
Arsenic	0.211	0.0500	mg/l	0.200	0.00910	101	81.5-118	2.80	23.6	
arium	1.32	0.100	11	0.500	0.904	83.2	90-112	0.755	24	L
'admium	0.198	0.00500	11	0.200	ND	99.0	90-114	1.01	23.4	
'hromium	0.190	0.100	11	0.200	ND	95.0	81.5-110	1.57	23.1	
ead	0.0265	0.00500	n	0.0300	0.00442	73.6	27.5-149	1.13	18.6	
elenium	0.229	0.0500	11	0.200	0.0110	109	86.8-119	0.870	25.6	
Silver	0.104	0.0500	*	0.100	ND	104	10-150	0.00	35	

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Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601239 **Reported:** 02/01/06 12:10

TCLP Metals by EPA 1311/6000/7000 Series Methods - Quality Control

TestAmerica - Buffalo Grove, IL

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6010400 - EPA 7470A										
Blank (6010400-BLK1)				Prepared &	k Analyze	d: 01/26/	06			
Mercury	ND	0.000200	mg/l							
LCS (6010400-BS1)				Prepared &	k Analyze	d: 01/26/	06			
Mercury	0.00164	0.000200	mg/l	0.00150		109	78.8-127			
Matrix Spike (6010400-MS1)	Soi	urce: B60123	9-01	Prepared &	k Analyze	d: 01/26/	06			
Mercury	0.00174	0.000200	mg/l	0.00150	0.0000690	111	76-128			
Matrix Spike Dup (6010400-MSD1)	Sou	urce: B60123	9-01	Prepared &	k Analyze	d: 01/26/0	06		_	
Mercury	0.00186	0.000200	mg/l	0.00150	0.0000690	119	76-128	6.67	10	

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argaret Knied



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Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

TCLP Volatile Organic Compounds by EPA Methods 1311/8260B - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6010354 - EPA 5030B TCL	.P/SPLP									
Blank (6010354-BLK1)				Prepared 6	& Analyze	d: 01/23/	06			
Benzene	ND	0.400	mg/l							
Carbon tetrachloride	ND	0.400	11							
Chlorobenzene	ND	0.400	**							
Chloroform	ND	0.400	"							
1,2-Dichloroethane	ND	0.400								
1,1-Dichloroethylene	ND	0.400	н							
Methyl ethyl ketone	ND	100	н							
Tetrachloroethene	ND	0.400	17							
Trichloroethylene	ND	0.400	**							
Vinyl chloride	ND	0.160	"							
Surrogate: Dibromofluoromethane	0.0524		"	0.0500		105	55.9-150			
Surrogate: 1,2-Dichloroethane-d4	0.0498		"	0.0500		99.6	47.5-150			
Surrogate: Toluene-d8	0.0508		"	0.0500		102	55.4-145			
ırrogate: 4-Bromofluorobenzene	0.0506		"	0.0500		101	40.4-137			
LCS (6010354-BS1)				Prepared of	& Analyze	d: 01/23/	06			
Benzene	1.07	0.400	mg/l	1.00		107	54.8-130			
Carbon tetrachloride	1.06	0.400	11	1.00		106	43.4-141			
Chlorobenzene	0.907	0.400	"	1.00		90.7	56.2-127			
Chloroform	1.38	0.400		1.00		138	53.7-135			н
1,2-Dichloroethane	1.16	0.400	"	1.00		116	54.6-140			
1,1-Dichloroethylene	1.03	0.400		1.00		103	45.9-129			
Methyl ethyl ketone	1.65	100	**	1.00		165	10-150			н
Tetrachloroethene	0.917	0.400	**	1.00		91.7	46.7-131			
Trichloroethylene	1.13	0.400		1.00		113	59.2-135			
Vinyl chloride	0.908	0.160	11	1.00		90.8	28.4-150			
Surrogate: Dibromofluoromethane	0.0523		*	0.0500		105	55.9-150			
Surrogate: 1,2-Dichloroethane-d4	0.0511		"	0.0500		102	47.5-150			
Surrogate: Toluene-d8	0.0520		"	0.0500		104	55.4-145			
Surrogate: 4-Bromofluorobenzene	0.0511		"	0.0500		102	40.4-137			

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Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 **Reported:** 02/01/06 12:10

TCLP Volatile Organic Compounds by EPA Methods 1311/8260B - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
		Data			, court					.10163
Batch 6010354 - EPA 5030B TCLP/S		D/212			2. A :: *	4. 01/02				
Matrix Spike (6010354-MS1)		urce: B60123			& Analyze					
Benzene Control total basida	1.08	0.400	mg/l "	1.00	ND	108	50.5-150			
Carbon tetrachloride	1.07	0.400		1.00	ND	107	13.8-160			
Chlorobenzene	0.926	0.400		1.00	ND	92.6	66.9-142			
Chloroform	1.35	0.400	"	1.00	0.145	120	67.5-144			
1,2-Dichloroethane	1.17	0.400	11	1.00	ND	117	69.6-144			
1,1-Dichloroethylene	1.02	0.400	"	1.00	ND	102	24.4-156			
Methyl ethyl ketone	0.912	100	•	1.00	ND	91.2	31.3-167			
Tetrachloroethene	0.919	0.400	"	1.00	ND	91.9	13.6-175			
Trichloroethylene	1.11	0.400	18	1.00	ND	111	26.2-168			
Vinyl chloride	0.913	0.160	"	1.00	ND	91.3	29-152			
Surrogate: Dibromofluoromethane	0.0524		"	0.0500		105	55.9-150			
Surrogate: 1,2-Dichloroethane-d4	0.0508		"	0.0500		102	47.5-150			
Surrogate: Toluene-d8	0.0518		"	0.0500		104	55.4-145			
rrogate: 4-Bromofluorobenzene	0.0516		~	0.0500		103	40.4-137			
Matrix Spike Dup (6010354-MSD1)	Sou	arce: B60123	9-01	Prepared &	& Analyze	d: 01/23/	96			
Benzene	1.11	0.400	mg/l	1.00	ND	111	50.5-150	2.74	35.4	
Carbon tetrachloride	1.08	0.400	11	1.00	ND	108	13.8-160	0.930	56.3	
Chlorobenzene	0.958	0.400	ıı	1.00	ND	95.8	66.9-142	3.40	25.8	
Chloroform	1.36	0.400	"	1.00	0.145	122	67.5-144	0.738	35.8	
1,2-Dichloroethane	1.18	0.400	11	1.00	ND	118	69.6-144	0.851	28.3	
1,1-Dichloroethylene	1.02	0.400	н	1.00	ND	102	24.4-156	0.00	38.4	
Methyl ethyl ketone	0.939	100		1.00	ND	93.9	31.3-167	2.92	46	
Tetrachloroethene	0.957	0.400	íı	1.00	ND	95.7	13.6-175	4.05	39.7	
Trichloroethylene	1.14	0.400	н	1.00	ND	114	26.2-168	2.67	33.7	
Vinyl chloride	0.927	0.160		1.00	ND	92.7	29-152	1.52	44.4	
Surrogate: Dibromosluoromethane	0.0514			0.0500		103	55.9-150			
Surrogate: 1,2-Dichloroethane-d4	0.0496		"	0.0500		99.2	47.5-150			
Surrogate: Toluene-d8	0.0520		"	0.0500		104	55.4-145			

0.0500

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Surrogate: 4-Bromofluorobenzene

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40.4-137

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& Reviewed Approved by:

Margaret Kniest For Andy Johnson, Project Manager

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

TCLP Semivolatiles by EPA Methods 1311/8270C - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6010322 - EPA 3510C TC	LP/SPLP									
Blank (6010322-BLK1)				Prepared:	01/20/06	Analyzed	l: 01/23/06			
o-Cresol	ND	20.0	mg/l							
m,p-Cresols	ND	20.0	Ħ							
Cresol	ND	20.0								
1,4-Dichlorobenzene	ND	0.750	**							
2,4-Dinitrotoluene	ND	0.0200								
Hexachlorobenzene	ND	0.0200	u.							
Hexachlorobutadiene	ND	0.0500	*							
Hexachloroethane	ND	0.300								
Nitrobenzene	ND	0.200	**							
Pentachlorophenol	ND	10.0	"							
Pyridine	ND	0.500	*							
2,4,5-Trichlorophenol	ND	40.0	#							
2,4,6-Trichlorophenol	ND	0.200	**							
arrogate: 2-Fluorophenol	0.107		n	0.500		21.4	10-110			
Surrogate: Phenol-d6	0.0806		"	0.500		16.1	10-110			
Surrogate: Nitrobenzene-d5	0.129		"	0.250		51.6	10-116			
Surrogate: 2-Fluorobiphenyl	0.130		"	0.250		52.0	10-119			
Surrogate: 2,4,6-Tribromophenol	0.174		"	0.500		34.8	10-114			
Surrogate: p-Terphenyl-d14	0.107		"	0.250		42.8	10-135			
LCS (6010322-BS1)				Prepared:	01/20/06	Analyzed	: 01/23/06			
o-Cresol	0.137	0.0200	mg/l	0.500		27.4	10-110		- 	
m,p-Cresols	0.261	0.200	10	1.00		26,1	10-110			
Cresol	0.398	0.200		1.50		26.5	10-110			
1,4-Dichlorobenzene	0.238	0.0750	11	0.500		47.6	10-110			
2,4-Dinitrotoluene	0.214	0.0200	10	0.500		42.8	10-110			
Hexachlorobenzene	0.207	0.0200	"	0.500		41.4	10-110			
Hexachlorobutadiene	0.221	0.0500		0.500		44.2	10-118			
Hexachloroethane	0.211	0.0300	11	0.500		42.2	10-110			
Nitrobenzene	0.274	0.200	n	0.500		54.8	10-119			
Pentachlorophenol	0.201	0.100	"	0.500		40.2	10-110			
Pyridine	0.0704	0.0500	**	0.500		14.1	10-110			
2,4,5-Trichlorophenol	0.177	0.0400	**	0.500		35.4	10-110			
2,4,6-Trichlorophenol	0.172	0.0200	H	0.500		34.4	10-110			
Surrogate: 2-Fluorophenol	0.0998			0.500		20.0	10-110			
Surrogate: Phenol-d6	0.0755		"	0.500		15.1	10-110			

TestAmerica - Buffalo Grove, IL

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1380 Busch Parkway **Buffalo Grove, Illinois 60089**

Project: OMC - Waukegan

1800 Carillon Blvd. Project Number: 10315 Cincinnati, OH 45240 Project Manager: Jackie Doan Phone: (847) 808-7766 Fax: (847) 808-7772

Lab ID: B601239 Reported: 02/01/06 12:10

TCLP Semivolatiles by EPA Methods 1311/8270C - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6010322 - EPA 3510C TCLP/S	SPLP									
LCS (6010322-BS1)				Prepared:	01/20/06	Analyzed	l: 01/23/06			
Surrogate: Nitrobenzene-d5	0.140		mg/l	0.250		56.0	10-116			
Surrogate: 2-Fluorobiphenyl	0.135		"	0.250		54.0	10-119			
Surrogate: 2,4,6-Tribromophenol	0.177		~	0.500		35.4	10-114			
Surrogate: p-Terphenyl-d14	0.115		*	0.250		46.0	10-135			
Matrix Spike (6010322-MS1)	So	urce: B60119	6-01	Prepared:	01/20/06	Analyzed	l: 01/23/06			_
o-Cresol	0.173	0.0180	mg/l	0.500	ND	34.6	10-110			
m,p-Cresols	0.333	0.180	11	1.00	ND	33.3	10-110			
Cresol	0.506	0.180	11	1.50	ND	33.7	10-110			
1.4-Dichlorobenzene	0.258	0.0675	10	0.500	ND	51.6	10-110			
2,4-Dinitrotoluene	0.263	0.0180	"	0.500	ND	52.6	10-110			
Hexachlorobenzene	0.208	0.0180	"	0.500	ND	41.6	10-110			
Hexachlorobutadiene	0.221	0.0450	**	0.500	ND	44.2	10-111			
Hexachloroethane	0.224	0.0270	**	0.500	ND	44.8	10-110			
trobenzene	0.310	0.180		0.500	ND	62.0	10-115			
Pentachlorophenol	0.237	0.0900	н	0.500	ND	47.4	10-110			
Pyridine	0.0943	0.0450	н	0.500	ND	18.9	10-110			
2,4,5-Trichlorophenol	0.204	0.0360	"	0.500	ND	40.8	10-112			
2,4,6-Trichlorophenol	0.214	0.180		0.500	ND	42.8	10-111			
Surrogate: 2-Fluorophenol	0.124		"	0.500		24.8	10-110			
Surrogate: Phenol-d6	0.0955		~	0.500		19.1	10-110			
Surrogate: Nitrobenzene-d5	0.161		H	0.250		64.4	10-116			
Surrogate: 2-Fluorobiphenyl	0.152		"	0.250		60.8	10-119			
Surrogate: 2,4,6-Tribromophenol	0.222		"	0.500		44.4	10-114			
Surrogate: p-Terphenyl-d14	0.110		"	0.250		44.0	10-135			
Matrix Spike Dup (6010322-MSD1)	So	urce: B60119	6-01	Prepared:	01/20/06	Analyzed	: 01/23/06			
o-Cresol	0.150	0.0200	mg/l	0.500	ND	30.0	10-110	14.2	40	
m,p-Cresols	0.292	0.200	**	1.00	ND	29.2	10-110	13.1	40	
Cresol	0.442	0.200	10	1.50	ND	29.5	10-110	13.5	40	
1,4-Dichlorobenzene	0.248	0.0750	11	0.500	ND	49.6	10-110	3.95	40	
2,4-Dinitrotoluene	0.232	0.0200		0.500	ND	46.4	10-110	12.5	40	
Hexachlorobenzene	0.201	0.0200	•	0.500	ND	40.2	10-110	3.42	40	
Hexachlorobutadiene	0.223	0.0500	•	0.500	ND	44.6	10-111	0.901	40	
Hexachloroethane	0.223	0.0300	11	0.500	ND	44.6	10-110	0.447	40	
Nitrobenzene	0.281	0.200	10	0.500	ND	56.2	10-115	9.81	40	
	v.=01	J.= 30								

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Margaret Kniest Approved by:



Phone: (847) 808-7766 Fax: (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

TCLP Semivolatiles by EPA Methods 1311/8270C - Quality Control TestAmerica - Buffalo Grove, IL

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6010322 - EPA 3510C TCLP/	SPLP					_				
Matrix Spike Dup (6010322-MSD1)	Sou	rce: B60119	6-01	Prepared:	01/20/06	Analyzed	l: 01/23/06			
Pyridine	0.0720	0.0500	mg/l	0.500	ND	14.4	10-110	26.8	40	
2,4,5-Trichlorophenol	0.180	0.0400	н	0.500	ND	36.0	10-112	12.5	40	
2,4,6-Trichlorophenol	0.184	0.0200	11	0.500	ND	36.8	10-111	15.1	40	
Surrogate: 2-Fluorophenol	0.108		n	0.500		21.6	10-110			
Surrogate: Phenol-d6	0.0858		"	0.500		17.2	10-110			
Surrogate: Nitrobenzene-d5	0.141		*	0.250		56.4	10-116			
Surrogate: 2-Fluorobiphenyl	0.139		"	0.250		55.6	10-119			
Surrogate: 2,4,6-Tribromophenol	0.187		*	0.500		37.4	10-114			
Surrogate: p-Terphenyl-d14	0.102		"	0.250		40.8	10-135			

TestAmerica - Buffalo Grove, IL Margaret Kniest

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EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601239 **Reported:** 02/01/06 12:10

Percent Solids - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6010302 - General Prep										
Blank (6010302-BLK1)				Prepared	& Analyz	ed: 01/19/	06			
% Solids	ND	0.200	%							
Blank (6010302-BLK2)				Prepared	& Analyz	ed: 01/19/0	06			
% Solids	ND	0.200	%							
Duplicate (6010302-DUP1)	So	urce: B60123	7-01	Prepared	& Analyz	ed: 01/19/0	06			
% Solids	81.7	0.200	%		81.8			0.122	20	
Duplicate (6010302-DUP2)	So	urce: B60123	7-02	Prepared	& Analyz	ed: 01/19/0	06			
% Solids	80.1	0.200	%		79.6			0.626	20	

TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Margaret Knied



Phone: (847) 808-7766 Fax: (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601239

Reported: 02/01/06 12:10

General Chemistry Parameters - Quality Control TestAmerica Analytical - Nashville

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6012707 - NO PREP										
Blank (6012707-BLK1)				Prepared:	01/20/06	Analyzed	: 01/22/06		_	
Extractable Organic Halides	ND	50.0	mg/kg			_				
LCS (6012707-BS1)				Prepared:	01/20/06	Analyzed	: 01/22/06			
Extractable Organic Halides	982		mg/kg	1000		98	90-113			
Duplicate (6012707-DUP1)	So	urce: NPA18	29-05	Prepared:	01/20/06	Analyzed	: 01/22/06			
Extractable Organic Halides	32.2	50.0	mg/kg		33.1			3	20	
Matrix Spike (6012707-MS1)	So	urce: NPA17	58-01	Prepared:	01/20/06	Analyzed	: 01/22/06			
Extractable Organic Halides	904	50.0	mg/kg	1000	ND	90	61-141			
Matrix Spike Dup (6012707-MSD1)	So	urce: NPA17	58-01	Prepared:	01/20/06	Analyzed	: 01/22/06			
Extractable Organic Halides	1040	50.0	mg/kg	1000	ND	104	61-141	14	20	

TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

·____

largaret Knied



Phone: (847) 808-7766 Fax: (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601239

Reported: 02/01/06 12:10

TCLP Chlorinated Herbicides by EPA Method 8151 - Quality Control TestAmerica Analytical - Nashville

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
	1103411		- Oiles		- Icourt	- AREC				
Batch 6013738 - EPA 8151A										
Blank (6013738-BLK1)				Prepared:	01/23/06	Analyzed	I: 01/24/06			
2,4-D	ND	0.100	mg/L							
2,4,5-TP (Silvex)	ND	0.0100	"							
Surrogate: Dichloroacetic Acid	0.725		"	1.00		72	55-132			
LCS (6013738-BS1)				Prepared:	01/23/06	Analyzed	l: 01/24/06			
2,4-D	0.588	0.100	mg/L	0.500		118	39-140			
2,4,5-TP (Silvex)	0.512	0.0100	19	0.500		102	32-125			
Surrogate: Dichloroacetic Acid	0.979		"	1.00		98	55-132			
Matrix Spike (6013738-MS1)	Sou	rce: NPA18	71-01RE	1 Prepared:	01/23/06	Analyzed	l: 01/25/06			
2,4-D	0.430	0.100	mg/L	0.500	ND	86	33-142			
2,4,5-TP (Silvex)	0.481	0.0100	H	0.500	ND	96	32-125			
Surrogate: Dichloroacetic Acid	0.885		"	1.00		88	55-132			
atrix Spike Dup (6013738-MSD1)	Sou	rce: NPA18	71-01RE	1 Prepared:	01/23/06	Analyzed	1: 01/25/06			
2,4-D	0.372	0.100	mg/L	0.500	ND	74	33-142	14	48	
2,4,5-TP (Silvex)	0.429	0.0100	**	0.500	ND	86	32-125	11	39	
Surrogate: Dichloroacetic Acid	0.720		"	1.00		72	55-132			

TestAmerica - Buffalo Grove, IL

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Reviewed & ':Approved by



Phone: (847) 808-7766 Fax: (847) 808-7772

EQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601239 **Reported:** 02/01/06 12:10

TCLP Pesticides by EPA Method 1311/8081A - Quality Control TestAmerica Analytical - Nashville

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6013290 - EPA 3510C Leach:										
Blank (6013290-BLK1)	<u></u>			Prepared:	01/24/06	Analyzed	l: 01/26/06			
gamma-BHC (Lindane) [2C]	ND	0.000500	mg/L							
Chlordane [2C]	ND	0.000500								
Endrin (2C)	ND	0.000500	11							
Heptachlor [2C]	ND	0.000500	n							
Heptachlor epoxide [2C]	ND	0.000500	**							
Methoxychlor [2C]	ND	0.000500	*							
Toxaphene [2C]	ND	0.0100	**							
Surrogate: Tetrachloro-meta-xylene [2C]	0.00183		,	0.00250		73	58-117			
Surrogate: Decachlorobiphenyl [2C]	0.00216		*	0.00250		86	22-115			
LCS (6013290-BS1)				Prepared:	01/24/06	Analyzed	1: 01/26/06			
gamma-BHC (Lindane) [2C]	0.00755	0.000500	mg/L	0.0100		76	48-142			MNI
Endrin [2C]	0.00774	0.000500	"	0.0100		77	43-165			MNI
eptachlor [2C]	0.00426	0.000500	11	0.0100		43	30-134			MNI
reptachlor epoxide [2C]	0.00882	0.000500	"	0.0100		88	47-140			MNI
Methoxychlor [2C]	0.00742	0.000500	**	0.0100		74	40-145			MNE
Surrogate: Tetrachloro-meta-xylene [2C]	0.00192		"	0.00250		77	58-117			MNI
Surrogate: Decachlorobiphenyl [2C]	0.00204		"	0.00250		82	22-115			MNI
LCS (6013290-BS2)				Prepared:	01/24/06	Analyzed	l: 01/26/06			
Chlordane [2C]	0.111	0.000500	mg/L	0.0500		222	70-184			н 1
Toxaphene	0.119	0.0100	**	0.100		119	85-172			

TestAmerica - Buffalo Grove, IL

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Reviewed & Margaret Kniest Approved by:



Phone: (847) 808-7766 Fax: (847) 808-7772

EOM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240

Project Number: 10315 Project Manager: Jackie Doan

Lab ID: B601239 Reported: 02/01/06 12:10

Notes and Definitions

QC The result for one or more quality control measurements associated with this sample did not meet the laboratory and/or source

method acceptance criteria.

No sample flowed. Pass

MNR No results were reported for the MS/MSD. The sample used for the MS/MSD required dilution due to the sample matrix.

Because of this, the spike compounds were diluted below the detection limit.

L Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not

detected, data not impacted.

G33 The method does not specify a hold time for this analysis. Sample preparation and analysis commenced as soon as possible.

G26 The method requires this analysis to be performed immediately after sampling; however, the analysis was performed as soon as

possible upon sample arrival at the laboratory.

>220 >220 °F

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

Sample results reported on a dry weight basis dry

RPD Relative Percent Difference

L This quality control measurement is below the laboratory established limit.

Н This quality control measurement is above the laboratory established limit.

The laboratory is not NELAP accredited for this analyte by the indicated matrix and method.

The State of Illinois Accrediting Authority does not offer NELAP accreditation for this analyte by the indicated matrix and method.

Note: All analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

TestAmerica--Buffalo Grove, IL Wisconsin DNR Certification Lab ID: 999917160

TestAmerica--Buffalo Grove, IL NELAP Primary Accreditation: Illinois #100261

TestAmerica--Buffalo Grove, IL NELAP Secondary Accreditation: New Jersey #IL001

TestAmerica--Nashville, TN NELAP Secondary Accreditation: Illinois #200010

TestAmerica--Dayton, OH NELAP Secondary Accreditation: Illinois #200008

TestAmerica--Watertown, WI NELAP Primary Accreditation: Illinois #100453

TestAmerica--Watertown, WI Wisconsin DNR Certification Lab 1D: 128053530

TestAmerica - Buffalo Grove, IL

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Margaret Knied



CHAIN OF CUSTODY REPORT

1380 Busch Parkway Buffalo Grove, IL 60089-4505 (847) 808-7766 FAX (847) 808-7772

140 ! ran Road Oak Creun, WI 53154 (414) 570-9460 FAX (414) 570-9461

Client: EQM		Bill To:		TAT: (TAT: (STD) 4 DAY 3 DAY	2 DAY 1 DAY	< 24 HRS.
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13 January 2006

1380 Busch Parkway **Buffalo Grove, Illinois 60089**

Lab ID: B601076

Phone: (847) 808-7766

Fax: (847) 808-7772

Jackie Doan **EQM** 1800 Carillon Blvd. Cincinnati, OH 45240

RE: OMC - Waukegan

Enclosed are the results of analyses for samples received by the laboratory on 01/06/06. The sample results relate only to the tested analytes of interest and to the sample as received by the laboratory. At the time of analysis, the laboratory was in compliance with current NELAP standards and held accreditation for all analyses performed unless noted by a qualifier. The laboratory's Illinois NELAP accreditation number is 100261.

This report can not be reproduced, except in full, without written approval from the laboratory. If you have any questions concerning this report, please feel free to contact Andy Johnson.

Sincerely,

TestAmerica Analytical Testing Corporation

Deborah Lowe

unat I Ime

Laboratory Director

James Knapp

Quality Assurance Manager



Phone: (847) 808-7766 Fax: (847) 808-7772

EOM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601076 Reported: 01/13/06 17:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EMS-1:1-0-43	B601076-01	Soil	01/05/06 13:40	01/06/06 11:10
EMS-2:1-0-44	B601076-02	Soil	01/05/06 13:40	01/06/06 11:10

Sample Receipt Notes

Please note that the chain of custody (COC) included with this report is considered part of the report. The data user should review any comments or notes made on the COC. Any receipt issues found by the laboratory that are not noted on the COC will be stated below.

TestAmerica - Buffalo Grove, IL

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Reviewed & Approved by:

Margaret Kniest



Phone: (847) 808-7766 Fax: (847) 808-7772

cQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601076 **Reported:** 01/13/06 17:07

Polychlorinated Biphenyls by EPA Method 8082

TestAmerica - Buffalo Grove, IL

Analyte	Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EMS-1:1-0-43 (B601076-01) Soil	Sampled: 01/05/06 13:40	Recei	ved: 01/06	/06 11:10					
PCB-1016	ND	27.0	ug/kg dry	10	6010092	01/09/06	01/09/06	EPA 8082	
PCB-1221	ND	27.0	и	n	11	"	n	н	
PCB-1232	ND	27.0	n	*	11	n	n	u ·	
PCB-1242	ND	27.0	**	Ü	**	н	н	**	
PCB-1248	43800	13500	11	5000	u	н	01/13/06	u	
PCB-1254	ND	27.0	ıı	10	10	**	01/09/06	"	
PCB-1260	ND	27.0	н	н	10	11	*	н	
Surrogate: Tetrachloro-meta-xylene		53.6 %	10-1	21	11	"	"	"	
Surrogate: Decachlorobiphenyl		60.9 %	10-1	27	"	n	ti.	*	
EMS-2:1-0-44 (B601076-02) Soil	Sampled: 01/05/06 13:40	Recei	ved: 01/06	/06 11:10					
PCB-1016	ND	26.9	ug/kg dry	10	6010092	01/09/06	01/09/06	EPA 8082	
PCB-1221	ND	26.9	11	**	и	и	и	"	
PCB-1232	M	212	11	"		19	"		
1 CB-1232	ND	26.9		•	"				
PCB-1242	ND ND	26.9	н		" "	•	01/13/06		
						n 11	01/13/06 01/09/06		
PCB-1242	ND	26.9	и	н				I†	
PCB-1242 °CB-1248	ND 56800	26.9 13500	n u	5000	11	"	01/09/06	11	
PCB-1242 **CB-1248 CB-1254	ND 56800 ND ND	26.9 13500 26.9	n U	5000 10	H H	11	01/09/06	11 11	

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:

Margaret Kniest For Andy Johnson, Project Manager



Phone: (847) 808-7766 Fax: (847) 808-7772

ċQM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601076 Reported: 01/13/06 17:07

Percent Solids

TestAmerica - Buffalo Grove, IL

Analyte	Result	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
EMS-1:1-0-43 (B601076-01) Soil	Sampled: 01/05/06 13:40	Receiv	ed: 01/0	6/06 11:10					
% Solids	92.5	0.200	%	1	6010078	01/06/06	01/09/06	EPA 5035 7.5	
EMS-2:1-0-44 (B601076-02) Soil	Sampled: 01/05/06 13:40	Receiv	ed: 01/0	6/06 11:10					
% Solids	92.8	0.200	%	1	6010078	01/06/06	01/09/06	EPA 5035 7.5	

TestAmerica - Buffalo Grove, IL

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Reviewed & Margaret Knied Approved by:



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EOM

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601076 **Reported:** 01/13/06 17:07

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6010092 - EPA 3550B										
Blank (6010092-BLK1)				Prepared	& Analyze	ed: 01/09/	06			
PCB-1016	ND	25.0	ug/kg wet							
PCB-1221	ND	25.0	u							
PCB-1232	ND	25.0								
PCB-1242	ND	25.0	11							
PCB-1248	ND	25.0								
PCB-1254	ND	25.0	11							
PCB-1260	ND	25.0	**							
Surrogate: Tetrachloro-meta-xylene	21.8		,,	33.7		64.7	10-121			
Surrogate: Decachlorobiphenyl	26.9		"	33.7		79.8	10-127			
LCS (6010092-BS1)				Prepared	& Analyza	ed: 01/09/	06			
PCB-1016	63.7	25.0	ug/kg wet	84.0		75.8	14.4-123			
PCB-1260	57.5	25.0	*	84.0		68.5	12.2-132			
strogate: Tetrachloro-meta-xylene	20.4		,	33.6		60.7	10-121			
surrogate: Decachlorobiphenyl	25.1		19	33.6		74.7	10-127			
Matrix Spike (6010092-MS1)	So	urce: B6010	93-02	Prepared	& Analyze	ed: 01/09/	06			
PCB-1016	47.5	25.0	ug/kg wet	81.1	ND	58.6	10-112			
PCB-1260	45.4	25.0	n	81.1	ND	56.0	10-124			
Surrogate: Tetrachloro-meta-xylene	16.7		"	32.4		51.5	10-121			
Surrogate: Decachlorobiphenyl	20.8		n	32.4		64.2	10-127			
Matrix Spike Dup (6010092-MSD1)	So	ırce: B6010	93-02	Prepared	& Analyze	ed: 01/09/	06			
PCB-1016	55.4	25.0	ug/kg wet	85.1	ND	65.1	10-112	15.4	40	
PCB-1260	54.4	25.0	**	85.1	ND	63.9	10-124	18.0	40	
Surrogate: Tetrachloro-meta-xylene	17.5		"	34.1		51.3	10-121			
Surrogate: Decachlorobiphenyl	22.7		*	34.1		66.6	10-127			

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:

Margaret Kniest



Phone: (847) 808-7766 Fax: (847) 808-7772

сQМ

Project: OMC - Waukegan

1800 Carillon Blvd. Cincinnati, OH 45240 Project Number: 10315
Project Manager: Jackie Doan

Lab ID: B601076

Reported: 01/13/06 17:07

Percent Solids - Quality Control TestAmerica - Buffalo Grove, IL

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6010078 - General Prep										
Blank (6010078-BLK1)				Prepared:	01/06/06	Analyzed	1: 01/09/06			
% Solids	ND	0.200	%							
Duplicate (6010078-DUP1)	So	urce: B60104	19-27	Prepared:	01/06/06	Analyzed	l: 01/09/06			
% Solids	89.6	0.200	%		89.8			0.223	20	

TestAmerica - Buffalo Grove, IL

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reviewed & Approved by:

Margaret Kniest For Andy Johnson, Project Manager



Phone: (847) 808-7766 Fax: (847) 808-7772

≟QM Project: OMC - Waukegan

1800 Carillon Blvd.Project Number:10315Lab ID:B601076Cincinnati, OH 45240Project Manager:Jackie DoanReported:01/13/06 17:07

Notes and Definitions

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

L This quality control measurement is below the laboratory established limit.

H This quality control measurement is above the laboratory established limit.

The laboratory is not NELAP accredited for this analyte by the indicated matrix and method.

^ The State of Illinois Accrediting Authority does not offer NELAP accreditation for this analyte by the indicated matrix and method.

Note: All analytes, by matrix and method, are accredited following current NELAP standards unless specifically noted by way of a qualifier listed above.

TestAmerica--Buffalo Grove, IL Wisconsin DNR Certification Lab ID: 999917160

TestAmerica--Buffalo Grove, IL NELAP Primary Accreditation: Illinois #100261

TestAmerica--Buffalo Grove, IL NELAP Secondary Accreditation: New Jersey #IL001

TestAmerica--Nashville, TN NELAP Secondary Accreditation: Illinois #200010

TestAmerica--Dayton, OH NELAP Secondary Accreditation: Illinois #200008

TestAmerica--Watertown, WI NELAP Primary Accreditation: Illinois #100453

TestAmerica--Watertown, WI Wisconsin DNR Certification Lab ID: 128053530



TestAmerica - Buffalo Grove, IL

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& Reviewed Approved by: largaret Knied

Test/merical testing concounted

CHAIN OF CUSTODY REPORT

1380 Busch Parkv Buffalo Grove, Illinois 60089-4505 (847) 808-7766 FAX (847) 808-7772

Client: Frau	Bill To.	. :			TAT:	r. STD 4 DAY	3 DAY	2 DAY 1 DAY	<24 HRS.
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CIncinneti OH 45420				Terms: Net 30 days		Received at laboratory:	atow.	7 July	ab temp
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			# of Bottles / R / R / R / R	KG / 83/3	Sisting	1 7/3			ON FOR
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